



**RANCANG BANGUN SISTEM OTOMASI UNTUK
PEMELIHARAAN REPTIL BERBASIS INTERNET OF
THINGS**

**RANCANG BANGUN SISTEM OTOMASI UNTUK
PEMELIHARAAN REPTIL BEARDED DRAGON BERBASIS
INTERNET OF THINGS**

SKRIPSI

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PROGRAM STUDI TEKNIK MULTIMEDIA DAN JARINGAN

JURUSAN TEKNIK INFORMATIKA DAN KOMPUTER

POLITEKNIK NEGERI JAKARTA

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**Dibuat untuk Melengkapi Syarat-Syarat yang Diperlukan untuk
Memperoleh Diploma Empat Politeknik**

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PROGRAM STUDI TEKNIK MULTIMEDIA DAN JARINGAN

JURUSAN TEKNIK INFORMATIKA DAN KOMPUTER

POLITEKNIK NEGERI JAKARTA

2023

SURAT PERNYATAAN BEBAS PLAGIARISME

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KATA PENGANTAR

Puji dan syukur kehadiran Tuhan Yang Maha Esa yang telah memberikan rahmat dan karunia-Nya kepada penulis, karena atas berkat dan rahmatnya penulis berhasil menyelesaikan laporan skripsi ini tepat pada waktunya. Adapun tujuan dari dilakukan penulisan laporan ini sebagai rangka untuk memenuhi salah satu syarat untuk mencapai gelar Diploma Empat Politeknik. Dalam penyusunan laporan ini, penulis sadar bahwa selesainya laporan skripsi ini berkat dukungan dan bimbingan dari berbagai pihak, baik bersifat moril dan materi. Oleh karena itu penulis mengucapkan terima kasih kepada :

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Depok, 25 Juni 2023

Muhammad SulTony Saddam Holid



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Rancang Bangun Sistem Otomasi Untuk Pemeliharaan Reptil Bearded Dragon Berbasis Internet of Things

Abstrak

Reptil, termasuk bearded dragon, menjadi tren populer dalam dunia peliharaan dengan pendapatan impor hewan hidup mencapai USD 52.111.601. Peningkatan ini terjadi karena minat masyarakat Indonesia dalam memelihara hewan eksotis. Di beberapa negara Eropa, bearded dragon bahkan mencapai peringkat ketiga sebagai hewan peliharaan yang paling banyak dipelihara setelah anjing dan kucing. Namun, pemeliharaan bearded dragon memerlukan perhatian yang intensif untuk mencegah penyakit seperti Metabolic Bone Disease (MBD) obesitas dan lainnya. Untuk itu, diusulkanlah sistem pemeliharaan bearded dragon otomatis pada terrarium dengan fitur lampu dan pakan terjadwal, pemanas dan pendingin otomatis beserta air minum otomatis. Dalam implementasinya, sistem menggunakan sensor suhu dan kelembaban DHT 22, sensor ultrasonik HC-SR04 dan RTCDS3231. Alat ini menggunakan Arduino Mega dan ESP 32 sebagai media pengiriman dan penerimaan data dari tiap sensor. Penelitian ini menghasilkan nilai rata-rata keakuratan sensor DHT 22 dengan alat ukur asli adalah 97,92% untuk suhu dan 86,36% untuk kelembaban, sensor ultrasonik untuk status pakan dan air minum adalah dengan akurasi 97,55% dan RTCDS3231 dengan akurasi 99,93%. Setelah dilakukan pengujian durabilitas selama 5 hari dengan 5 skema dapat dikatakan alat ini memiliki durabilitas yg baik. Dengan alat ini diharapkan dapat membantu para pemilik bearded dragon dalam melakukan pemeliharaan.

Kata Kunci : *Reptil, Bearded Dragon, Terrarium, IoT, Sensor DHT 22, Sensor Ultrasonik, RTCDS3231*

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DAFTAR ISI

SURAT PERNYATAAN BEBAS PLAGIARISME	iii
LEMBAR PENGESAHAN	iv
KATA PENGANTAR.....	v
SURAT PERNYATAAN PERSETUJUAN PUBLIKASI.....	vi
<i>Abstrak</i>	vii
DAFTAR ISI	viii
DAFTAR GAMBAR	x
DAFTAR TABEL.....	xiii
BAB I PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Perumusan Masalah.....	2
1.3 Batasan Masalah.....	3
1.4 Tujuan dan Manfaat.....	3
1.5 Sistematika Penulisan.....	4
BAB II TINJAUAN PUSTAKA	6
2.1 Penelitian Terdahulu	6
2.2 Reptil	8
2.3 Bearded Dragon.....	8
2.4 Terrarium	9
2.5 Internet of Things	10
2.6 Arduino Mega 2560.....	10
2.7 NodeMCU ESP 32.....	10
2.8 Sinar Ultraviolet	11
2.9 Real Time Clock (RTC) DS3231.....	11
2.10 Sensor Ultrasonik HC – SR04.....	12
2.11 Motor Servo	12
2.12 Sensor suhu dan Kelembaban DHT 22	12
2.13 Relay.....	13
2.14 LCD 16x2	13
BAB III METODE PENELITIAN.....	14
3.1 Rancangan Penelitian	14
3.2 Tahapan Penelitian.....	14

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3.3 Objek Penelitian	16
BAB IV HASIL DAN PEMBAHASAN	17
4.1 Analisis Kebutuhan	17
4.2 Perancangan Sistem.....	19
4.2.1 Cara Kerja Alat	20
4.3 Realisasi Alat.....	23
4.3.1 Perancangan Perangkat Keras.....	23
4.3.2 Pemrograman dan Implementasi Alat.....	29
4.4 Pengujian	47
4.4.1 Prosedur Pengujian	47
4.4.2 Hasil Data Pengujian	50
4.4.3 Analisis Data.....	65
BAB V PENUTUP.....	73
5.1 Kesimpulan.....	73
5.2 Saran	73
DAFTAR PUSTAKA	74

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DAFTAR GAMBAR

Gambar 3. 1 Tahapan Penelitian	15
Gambar 4. 1 Diagram Blok Keseluruhan Sistem	20
Gambar 4. 2 Flowchart Keseluruhan Arduino	21
Gambar 4. 3 Skema Rangkaian Elektronik Keseluruhan.....	23
Gambar 4. 4 Skema Rangkaian Lampu Terjadwal.....	24
Gambar 4.5 Skema Rangkaian Pakan Terjadwal	25
Gambar 4. 6 Skema Rangkaian Air Minum Otomatis	27
Gambar 4.7 Skema Rangkaian Penghangat dan Pendingin Otomatis.....	28
Gambar 4.8 <i>Library</i> Software Serial.....	29
Gambar 4.9 Deklarasi pin RX TX dan membuat variabel penampung	29
Gambar 4.10 Deklarasi Serial Komunikasi.....	29
Gambar 4.11 Pengiriman data dari Arduino Mega menuju ESP 32.....	30
Gambar 4.12 Deklarasi pin RX2 dan TX2.....	30
Gambar 4.13 Fungsi menerima data melalui komunikasi serial	30
Gambar 4.14 Implementasi Arduino Mega dan ESP - 32	30
Gambar 4.15 <i>Library</i> Wifi Manager	31
Gambar 4.16 Logika koneksi internet dengan Wifi Manager	31
Gambar 4.17 <i>Library</i> DHT 22	32
Gambar 4.18 Deklarasi Pin dan Tipe DHT 22	32
Gambar 4. 19 Deklarasi Pin relay dan variabel penampung data dari DHT 22	32
Gambar 4.20 Deklarasi mode relay dan DHT 22.....	32
Gambar 4. 21 Fungsi untuk fitur penghangat dan pendingin DHT 22.....	33
Gambar 4.22 Pemanggilan fungsi fitur penghangat dan pendingin.....	33
Gambar 4.23 Implementasi Fitur Penghangat dan Pendingin Otomatis.....	34
Gambar 4.24 Deklarasi pin dan mode sensor ultrasonik.....	34
Gambar 4.25 Deklarasi pin dan mode relay.....	34
Gambar 4.26 Fungsi untuk fitur air minum otomatis.....	35
Gambar 4.27 pemanggilan fungsi untuk fitur air minum otomatis.....	35
Gambar 4.28 Implementasi Fitur Air Minum Otomatis.....	36
Gambar 4.29 <i>Library</i> RTCDS3231	36
Gambar 4.30 Variabel penampung RTCDS3231	36

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Gambar 4.31 inialisasi waktu awal RTCDS3231	37
Gambar 4.32 inialisasi pin dan mode relay4	37
Gambar 4.33 Deklarasi waktu menyala dan matinya lampu.....	37
Gambar 4.34 Fungsi lampu terjadwal	38
Gambar 4.35 Pemanggilan fungsi lampu terjadwal	38
Gambar 4.36 Implementasi Fitur Lampu Terjadwal	38
Gambar 4.37 <i>Library</i> servo dan EEPROM.....	39
Gambar 4.38 Deklarasi waktu pakan servo dan pin servo	39
Gambar 4.39 Variabel penampung data dari website menuju EEPROM.....	39
Gambar 4.40 Deklarasi pin servo dan posisi servo	40
Gambar 4.41 Fungsi <i>read</i> dan <i>write</i> pada EEPROM.....	40
Gambar 4.42 Fungsi fitur pakan terjadwal.....	41
Gambar 4.43 Pemanggilan fungsi fitur pakan terjadwal.....	42
Gambar 4.44 Implementasi Fitur Pakan Terjadwal.....	42
Gambar 4.45 Deklarasi pin dan mode sensor ultrasonik status pakan.....	42
Gambar 4.46 Fungsi status pakan	43
Gambar 4.47 Pemanggilan fungsi status pakan	43
Gambar 4.48 Implementasi Status Pakan.....	44
Gambar 4.49 <i>Library</i> dan variabel LCD	44
Gambar 4.50 Inialisasi LCD.....	44
Gambar 4.51 Fungsi LCD	45
Gambar 4.52 Pemanggilan fungsi LCD	46
Gambar 4. 53 Implementasi LCD 16x2	46
Gambar 4.54 Contoh Payload Paket yang Dikirimkan	64
Gambar 4.55 Diagram delay pengiriman ke server	64
Gambar 4.56 Hasil Pengujian Sensor DHT 22 Suhu	66
Gambar 4.57 Persentase Error Sensor DHT 22 Suhu	67
Gambar 4.58 Hasil Pengujian Sensor DHT 22 Kelembaban	67
Gambar 4.59 Persentase Error Sensor DHT 22 Kelembaban	68
Gambar 4.60 Hasil pengujian RTCDS3231	69
Gambar 4.61 Persentase Error RTCDS3231	69
Gambar 4.62 Hasil pengujian Ultrasonik Air Minum.....	70



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Gambar 4.63 Persentase Error Ultrasonik Air Minum..... 70
Gambar 4.64 Hasil Pengujian Ultrasonik Status Pakan 71
Gambar 4.65 Persentase Error Ultrasonik Status Pakan 71



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DAFTAR TABEL

Tabel 2.1 Penelitian Terdahulu.....	6
Tabel 4.1 Analisis Kebutuhan	17
Tabel 4.2 Tabel pin RTCDS3231	24
Tabel 4.3 Tabel Pin Relay 1	25
Tabel 4.4 Tabel Pin Ultrasonik status pakan	25
Tabel 4.5 Tabel Pin Motor Servo	26
Tabel 4.6 Tabel Pin LCD16x2.....	26
Tabel 4.7 Tabel Pin Ultrasonik Air Minum Otomatis	27
Tabel 4.8 Tabel Pin Relay 2	27
Tabel 4.9 Tabel Pin DHT 22.....	28
Tabel 4.10 Tabel Pin Relay 3	28
Tabel 4.11 Pengujian Fungsionalitas.....	50
Tabel 4. 12 Hasil Kuesioner Skala Guttman	54
Tabel 4. 13 Hasil Kuesioner Skala Likert	55
Tabel 4.14 Hasil Indeks %	57
Tabel 4.15 Pengujian Performa Suhu DHT 22.....	58
Tabel 4.16 Pengujian Performa Kelembaban DHT 22.....	59
Tabel 4.17 Pengujian Performa Modul RTCDS3231	60
Tabel 4.18 Pengujian Performa Sensor Ultrasonik Air minum otomatis.....	61
Tabel 4.19 Pengujian Performa Sensor Ultrasonik Status Pakan.....	62
Tabel 4.20 Pengujian performa Kipas Angin	63
Tabel 4.21 Pengujian Performa Lampu Pemanas	63
Tabel 4.22 Pengujian Durabilitas	64

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BAB I

PENDAHULUAN

1.1 Latar Belakang

Pada zaman ini, hobi merawat binatang merupakan hal umum yang sudah sangat sering dijumpai, mulai dari memelihara kucing, anjing marmut dan sebagainya. Reptil merupakan salah satu hewan yang sedang tren untuk dipelihara saat ini. Peningkatan reptil sebagai hewan yang ingin dipelihara ditandai dari jumlah pendapatan yang berasal dari impor hewan hidup yang mencapai nilai USD 52.111.601. Peningkatan angka ini disebabkan oleh tren masyarakat Indonesia untuk memelihara hewan eksotis atau reptil (Lo, 2021). Di eropa, reptil mengalami peningkatan sebagai hewan yang ingin dipelihara dengan total lebih dari 7 juta populasi pada perumahan di eropa (Marin et al., 2021). Bearded dragon memiliki sifat yang patuh, karena itu reptil ini mengalami peningkatan populer sebagai hewan yang ingin dipelihara sampai mencapai peliharaan ketiga yang paling banyak dipelihara setelah anjing dan kucing di beberapa negara eropa (Nathaniel, 2020).

Dalam pemeliharaan bearded dragon membutuhkan terrarium, terrarium cocok untuk bearded dragon yang suhu tubuhnya dipengaruhi oleh lingkungan sekitar karena dapat menyerupai dengan habitat alaminya. (Anggara, Riyanto and Yurisma, 2016) (Harahap and Nasution, 2021). Namun, tidak semua pemilik hewan memiliki waktu untuk memperhatikan kondisi tempat dan hewan yang mereka pelihara karena banyaknya aktifitas diluar rumah, mulai dari kebutuhan pakan, minum dan suhu kandangnya (Suhendi and Saputro, 2021). Reptil membutuhkan pakan yang terjadwal dan teratur agar terhindar dari obesitas (Kristensen et al., 2022), membutuhkan sinar uv untuk menjaga suhu tubuhnya agar terhindar dari penyakit *Metabolic Bone Disease* (MBD) yang merupakan dampak dari defisiensi dari paparan sinar uv (Prameswari et al., 2020) beserta suhu dan kelembaban yang stabil pada terrarium agar terhindar dari kesulitan pencernaan makanan dan dehidrasi (Exotic Market Indonesia, 2022). Bearded dragon yang membutuhkan makan 2 kali dalam sehari, membutuhkan lampu UVA/UVB selama 12 jam setiap harinya agar suhu tubuhnya tetap terjaga, membutuhkan suhu terrarium kisaran 22°C – 42°C



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agar dapat menjaga suhu tubuhnya dan air sebanyak 10 – 30ml agar tetap terhidrasi (Royal Society for the Prevention of Cruelty to Animals, 2019) (McKinney, 2023).

Untuk mempermudah pemeliharaan bearded dragon, telah hadir teknologi yang bernama Internet of Things. Internet of Things atau IoT merupakan konsep yang memiliki tujuan untuk menyatukan berbagai macam objek di dunia nyata agar dapat saling berkomunikasi dan menjadi bagian dari sistem yang terintegrasi dengan menggunakan jaringan internet sebagai penghubung. Dengan adanya teknologi ini maka dimungkinkan untuk membuat sistem otomatis dengan menggabungkan antara aktuator dan mesin dengan teknologi sensor (Pridiatama and Agustin, 2021). Adapun beberapa pengembangan sistem cerdas pada kandang ataupun terrarium yang telah dilakukan sebelumnya menggunakan teknologi dan fitur yang berbeda. Seperti pada penelitian Smart Terrarium yang dilakukan oleh (Swambara, Sumaryo and Estanto, 2019) yang menggunakan Sensor DHT 22 dan Moisture sensor. Namun, sistem ini hanya berfokus pada parameter suhu dan juga kelembaban yang ada pada terrarium, tidak memperhatikan sistem pemeliharaan pada reptilnya seperti pemberian pakan dan juga minum. Dan juga sistem ini menggunakan substrat berupa tanah yang dimana jika termakan oleh bearded dragon akan menyebabkan impaksi (Johnson and Adwick, 2018).

Berdasarkan latar belakang tersebut, maka dilakukanlah rancang bangun sistem otomasi untuk pemeliharaan reptil bearded dragon. Sistem ini bertujuan untuk melakukan otomasi pada perawatan bearded dragon di terrarium dengan menggunakan teknologi seperti penggunaan RTC DS3231 untuk penjadwalan pakan dan lampu UVA/UVB pada terrarium, penggunaan sensor ultrasonik HC – SR04 sebagai indikator isi tempat pakan dan indikator air minum otomatis, kemudian sensor DHT 22 sebagai indikator penghangat dan pendingin pada terrarium. Sistem ini menggunakan Mikrokontroler Arduino Mega untuk pemrosesan dan ESP 32 sebagai transmisi data dan kontrol. Sistem ini dapat dimonitoring dan dikontrol menggunakan website.

1.2 Perumusan Masalah

Berikut merupakan perumusan masalah berdasarkan latar belakang pada penelitian ini :



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1. Bagaimana merancang bangun sistem sistem otomasi untuk pemeliharaan reptil bearded dragon dengan fitur seperti pemberian pakan dan lampu terjadwal, pemberian air minum otomatis dan penghangat beserta pendingin otomatis?
2. Bagaimana kinerja modul sensor ultrasonik HC - SR04, sensor DHT 22 dan RTC DS3231 pada sistem otomasi untuk pemeliharaan reptil bearded dragon ?

1.3 Batasan Masalah

Berikut merupakan batasan masalah dari penelitian ini :

1. Mikrokontroller yang digunakan adalah ESP 32 dan Arduino Mega dan software yang digunakan adalah berbasis website.
2. Sensor yang digunakan adalah sensor ultrasonik HC – SR04 sebagai parameter air dan pakan, sensor suhu dan kelembaban DHT 22 sebagai parameter penghangat dan pendingin pada terrarium dan RTC DS3231 sebagai modul penjadwalan.
3. Reptil yang diujikan berjenis Bearded Dragon dengan jumlah 1 ekor dan berumur 2 bulan dengan ukuran 10 – 15 cm.
4. Ekosistem terrarium disesuaikan dengan kebutuhan bearded dragon dan berukuran 60x35x35cm.
5. Pakan yang digunakan merupakan pakan yang sudah dikeringkan.
6. Pengujian yang dilakukan adalah fungsionalitas untuk menguji fungsionalitas dari sistem yang dibuat, pengujian performa untuk menguji akurasi dari sensor yang digunakan sebanyak 20x percobaan dan membandingkan dengan alat ukur asli serta pengujian durabilitas untuk menguji ketahanan sistem selama 2 jam, 4 jam, 8 jam, 12 jam dan 24 jam

1.4 Tujuan dan Manfaat

Berikut merupakan tujuan dan manfaat dari penelitian ini adalah :

Tujuan :

1. Membuat rancang bangun sistem otomasi untuk pemeliharaan bearded dragon dengan fitur pemberian pakan dan lampu terjadwal, pemberian air minum



- otomatis dan penghangat beserta pendingin otomatis pada terrarium untuk reptil bearded dragon berbasis IoT beserta terhubung dengan website.
2. Melakukan dan mendapatkan hasil pengujian pada pakan dan lampu terjadwal, pemberian air minum otomatis penghangat beserta pendingin otomatis pada terrarium untuk reptil bearded dragon berbasis IoT

Manfaat :

1. Memudahkan pemilik terrarium untuk memelihara dan memantau kondisi bearded dragon beserta terrarium.
2. Menghindari kelalaian pemilik dalam menjaga pola makan, kebutuhan air, kebutuhan pemanas pada bearded dragon dan dalam menjaga suhu pada terrarium bearded dragon.

1.5 Sistematika Penulisan

Berikut merupakan sistematika atau kerangka dalam penulisan skripsi :

a. BAB I PENDAHULUAN

Bab I berisikan latar belakang dari penelitian, rumusan masalah yang didapat dari latar belakang, batasan masalah pada penelitian ini, serta manfaat dan tujuan dalam penelitian ini.

b. BAB II TINJAUAN PUSTAKA

Bab II berisikan tentang landasan teori dan konsep terkait dengan permasalahan pada penelitian ini, serta penelitian terdahulu yang relevan untuk dikaji dalam penelitian ini.

c. BAB III PERENCANAAN DAN REALISASI ATAU RANCANG BANGUN

Bab III berisikan tentang metode penelitian, tahapan penelitian, objek dari penelitian, model penelitian, teknik pengumpulan dan analisis data, hingga jadwal pelaksanaan beserta perkiraan biaya dalam penelitian ini.

d. BAB IV PEMBAHASAN

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Bab IV berisikan pembahasan mengenai pengujian penelitian yang telah dirancang, deskripsi pengujian aplikasi, prosedur pengujian, dan evaluasi hasil data penelitian.

e. BAB V PENUTUP

Bab V berisikan penjelasan mengenai hasil akhir dari penelitian berupa kesimpulan dan saran untuk penelitian berikutnya.



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BAB V

PENUTUP

5.1 Kesimpulan

Berdasarkan dari hasil rancang bangun sistem otomasi untuk pemeliharaan reptil bearded dragon berbasis internet of thing dapat diperoleh beberapa kesimpulan sebagai berikut :

1. Sistem otomasi untuk pemeliharaan reptil bearded dragon berbasis internet of thing dengan fitur lampu dan pakan terjadwal menggunakan RTCDS3231, air minum otomatis dengan HCSR – 04 beserta penghangat dan pendingin otomatis menggunakan DHT – 22 sudah berfungsi sesuai dengan rancangan berdasarkan hasil pengujian fungsionalitas, sensor yang digunakan memiliki akurasi yang baik berdasarkan pengujian performa dan memiliki ketahanan yang baik berdasarkan pengujian durabilitas.
2. Keakuratan sensor ultrasonik HC – SR04 untuk air minum dan status pakan setelah dibandingkan dengan penggaris memiliki tingkat akurasi 97,55% dengan *Error rate* 2,44%, kemudian modul RTCDS3231 miliki tingkat akurasi 99,93% dengan *Error rate* 0,061% setelah dibandingkan dengan jam digital. Sensor suhu dan kelembaban DHT 22 memiliki tingkat akurasi sebesar 97,92% dengan *Error rate* 2.07% untuk suhu dan 86,36% dengan *Error rate* 13,63% untuk kelembaban setelah dibandingkan dengan thermohyrometer HTC – 1.

5.2 Saran

Berdasarkan penelelitian yang telah dibuat, berikut beberapa saran yang dapat dijadikan masukan untuk penelitian selanjutnya, diantaranya :

1. Dapat menggunakan modul load cell pada tempat pakan agar dapat mengetahui berat pakan tiap porsi.
2. Dapat menambahkan fitur kamera agar dapat memantau kondisi bearded dragon didalam terrariumnya
3. Menggunakan beberapa sensor dengan versi yang lebih tinggi agar mendapatkan hasil tingkat akurasi dan durabilitas yang lebih baik lagi.



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DAFTAR RIWAYAT HIDUP PENULIS

Muhammad Sultony Saddam Holid

Lahir di Jakarta pada hari Selasa tanggal 16 Oktober 2001. Penulis merupakan anak pertama dari tiga bersaudara, berdomisili di Depok, Jawa Barat. Pendidikan formal penulis pertama kali di Mi Al - Muhajirin Depok pada tahun 2007 dan tamat pada tahun 2013, dilanjutkan ke MTS Muhammadiyah Depok dan tamat pada tahun 2016. Setelah lulus dari Sekolah Menengah Pertama penulis melanjutkan pendidikan ke SMK Al – Muhajirin Depok dengan Jurusan TKJ dan lulus pada tahun 2019. Pada tahun yang sama, penulis berkesempatan untuk melanjutkan kuliah di Politeknik Negeri Jakarta dengan Jurusan Teknik Informatika dan Komputer dengan Program Studi Teknik Multimedia dan Jaringan.

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Source Code Arduino Mega

```
1 #include <Arduino.h>
2 #include <DHT_U.h>
3 #include <SoftwareSerial.h>
4
5 #define TRIGGER_PIN1 18
6 #define ECHO_PIN1 21
7 #define TRIGGER_PIN2 6
8 #define ECHO_PIN2 7
9 #define MAX_DISTANCE 200
10 #define DHTPIN 8
11 #define DHTTYPE DHT22
12
13 DHT dht(DHTPIN, DHTTYPE);
14 SoftwareSerial arduino(34, 35); // RX,TX
15
16 String isWaterAvailable;
17 String isFoodAvailable;
18 String finalData;
19
20 int chk;
21 const int relay1 = 24;
22 const int relay2 = 26;
23 const int relay3 = 12;
24
25 float hum;
26 float temp;
27
28 long duration1, duration2, distance1, distance2;
29
30 void kipasdanpenghangat() { // f1x
31   hum = dht.readHumidity();
32   temp = dht.readTemperature();
33   Serial.print("Humidity: ");
34   Serial.print(hum);
35   Serial.print(" % , Temp: ");
36   Serial.print(temp);
37   Serial.println(" Celsius");
38   if (temp >= 42.00) { // batas maksimal tertinggi : 42
39     digitalWrite(relay1, HIGH);
40     digitalWrite(relay3, LOW);
41   }
42   else if (temp <= 23.00) { // batas maksimal terendah : 22
43     digitalWrite(relay1, LOW);
44     digitalWrite(relay3, HIGH);
45   }
46   else {
47     digitalWrite(relay1, LOW);
48     digitalWrite(relay3, LOW);
49   }
50 }
51
52 void airotomatis() { // f1x
53   digitalWrite(TRIGGER_PIN1, LOW);
54   delayMicroseconds(2);
55   digitalWrite(TRIGGER_PIN1, HIGH);
56   delayMicroseconds(10);
57   digitalWrite(TRIGGER_PIN1, LOW);
58   duration1 = pulseIn(ECHO_PIN1, HIGH);
59   distance1 = duration1 * 0.034 / 2;
60   Serial.print(distance1);
61   Serial.println(" cm");
62   if (distance1 >= 9) {
63     digitalWrite(relay2, HIGH);
64     Serial.println("Air Kurang");
65     isWaterAvailable = "false";
66   }
67   else if (distance1 <= 7 && distance1 >= 1) {
68     digitalWrite(relay2, LOW);
69     Serial.println("Air tersedia");
70   }
71 }
72
73 void statuspakan() { // Kalibrasi
74   digitalWrite(TRIGGER_PIN2, LOW);
75   delayMicroseconds(2);
76   digitalWrite(TRIGGER_PIN2, HIGH);
77   delayMicroseconds(10);
78   digitalWrite(TRIGGER_PIN2, LOW);
79   duration2 = pulseIn(ECHO_PIN2, HIGH);
80   distance2 = duration2 * 0.034 / 2;
81   Serial.print(distance2);
82   Serial.println(" cm");
83   if (distance2 >= 10) {
84     Serial.println("Pakan Kurang");
85     isFoodAvailable = "false";
86   }
87   else if (distance2 <= 9 && distance2 >= 1) {
88     Serial.println("Pakan tersedia");
89     isFoodAvailable = "true";
90   }
91 }
92
93 void setup() {
94   Serial.begin(9600);
95   arduino.begin(9600);
96   // Suhu dan kelembaban
97   dht.begin();
98   // relay
99   pinMode(relay1, OUTPUT);
100  pinMode(relay2, OUTPUT);
101  pinMode(relay3, OUTPUT);
102
103  // ultrasonik
104  pinMode(TRIGGER_PIN1, OUTPUT);
105  pinMode(ECHO_PIN1, INPUT);
106  pinMode(TRIGGER_PIN2, OUTPUT);
107  pinMode(ECHO_PIN2, INPUT);
108 }
109
110 void loop() {
111   kipasdanpenghangat();
112   airotomatis();
113   statuspakan();
114   finalData = String(temp) + "°" + String(hum) + "°" + isFoodAvailable + "°" +
115   isWaterAvailable + "!";
116   // finalData = String("30.10") + "°" + String("68.80") + "°" +
117   // String(distance2) + "°" + isWaterAvailable + "!";
118   Serial.println(" ");
119   Serial.print(finalData);
120   arduino.print(finalData);
121   Serial.println(" ");
122   delay(1000);
123 }
```



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Source Code ESP 32

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```
1 #include <Arduino.h>
2 #include <ArduinoJson.h>
3 #include <EEPROM.h>
4 #include <HttpClient.h>
5 #include <LiquidCrystal_I2C.h>
6 #include <PubSubClient.h>
7 #include <RTCLib.h>
8 #include <SPI.h>
9 #include <Servo.h>
10 #include <WiFiManager.h>
11
12 #define START_LAMPU 8
13 #define FINISH_LAMPU 19
14 #define START_MAKAN_JAM 8
15 #define START_MAKAN_JAM2 16
16 #define START_MAKAN_MENIT 0
17 #define START_MAKAN_DETIK_AHAL 1
18 #define START_MAKAN_DETIK_AKHIR 2
19 #define LED 2
20 #define SERVO_PIN 18
21
22 // Relay
23 const int relay4 = 19;
24 // MQTT
25 const int mqttPort = 1883;
26 const char* mqttUser = "";
27 const char* mqttPassword = "";
28 const char* mqttServer = "broker.mqtt-dashboard.com";
29 // RTC
30 char daysOfTheWeek[7][12] = {"Minggu", "Senin", "Selasa", "Rabu",
31 | | | | | "Kamis", "Jumat", "Sabtu"};
32 char msg[75];
33
34 // LCD DISPLAY
35 // 1 data makan, 2 data air, 3 suhu, 4 kelembaban, 5 data Lampu
36 int displayCondition = 1;
37 // RTC
38 int tanggal, bulan, tahun, jam, menit, detik;
39 // variable millis
40 int displayInterval = 5000;
41 int lamaBuka = 2000;
42 unsigned long lastMsg = 0;
43 unsigned long makanTimeStam = 0;
44 unsigned long displayTimestamp = 0;
45
46 // Save Jam to EEPROM
47 // unsigned long timeInSeconds = jam * 3600 + menit * 60 + detik;
48
49 String BASE_URL = "http://192.168.1.10:8000";
50 String mode;
51 String Mode;
52 String jam1;
53 String jam2;
54 String dataIn;
55 String dataId;
56 String dataPin;
57 String isLampAvailable;
58 String hari;
59 String StatusAlat;
60 // String waktu = String(timeInSeconds);
61 boolean isMakan = false;
62 // Variabel Khusus
63 RTC_DS3231 rtc;
64 Servo servoMotor;
65 LiquidCrystal_I2C lcd(0x27, 20, 4);
66 WiFiClient espClient;
67 PubSubClient mqttClient(espClient);
68
69 // MQTT
70 void connectToWiFi();
71 void connectToMqtt();
72 void callback(char* topic, byte* payload, unsigned int length);
73
74 void serial() {
75 if (Serial2.available() > 0) {
76 dataIn = Serial2.readStringUntil('\n');
77 Serial.println(dataIn);
78 }
79 }
80
81 String stringSpliter(String data, char separator, int index) {
82 int found = 0;
83 int strIndex[] = {0, -1};
84 int maxIndex = data.length() - 1;
85
86 for (int i = 0; i <= maxIndex & found <= index; i++) {
87 if (data.charAt(i) == separator || i == maxIndex) {
88 found++;
89 strIndex[0] = strIndex[1] + 1;
90 strIndex[1] = (i == maxIndex) ? i + 1 : i;
91 }
92 }
93 return found > index ? data.substring(strIndex[0], strIndex[1]) : "";
94 }
95
96
97 String readFromEEPROM(int addrOffset) {
98 int newStrLen = EEPROM.read(addrOffset);
99 char data[newStrLen + 1];
100 for (int i = 0; i < newStrLen; i++) {
101 data[i] = EEPROM.read(addrOffset + 1 + i);
102 }
103 data[newStrLen] = '\0';
104 return String(data);
105 }
106
107 void writeToEEPROM(int addrOffset, const String& strToWrite) {
108 int len = strToWrite.length();
109 Serial.println("Store new data to EEPROM");
110 EEPROM.write(addrOffset, len);
111 for (int i = 0; i < len; i++) {
112 EEPROM.write(addrOffset + 1 + i, strToWrite[i]);
113 EEPROM.commit();
114 }
115 }
116
117 int DeviceId(String endpoint) {
118 String url = BASE_URL + endpoint;
119 Serial.print("URL: ");
120 Serial.println(url);
121 HttpClient http;
122 http.begin(url);
123 http.addHeader("Content-Type", "application/json");
124 int httpCode = http.GET();
125 Serial.print("HTTP STATUS: ");
126
127 Serial.print("HTTP STATUS: ");
128 Serial.println(httpCode);
129 Serial.print("Data: ");
130
131 String message = http.getString();
132 Serial.println(message);
133 StaticJsonDocument<500> doc; // Memory pool
134 DeserializationError error = deserializeJson(doc, message);
135 String idDevice = doc["data"]["deviceID"];
136 String idPin = doc["data"]["devicePIN"];
137 Serial.println(idDevice);
138 Serial.println(idPin);
139 Serial.print("err: ");
140 Serial.println(error.f_str());
141 writeToEEPROM(50, idDevice);
142 writeToEEPROM(70, idPin);
143 dataId = readFromEEPROM(50);
144 dataPin = readFromEEPROM(70);
145 Serial.print("data yang diinput = ");
146 Serial.println(dataId);
147 Serial.println(dataPin);
148
149 http.end();
150 return httpCode;
151 }
152
153 void lampu() { // fix
154 DateTime now = rtc.now();
155 jam = now.hour(), DEC;
156 menit = now.minute(), DEC;
157 detik = now.second(), DEC;
158
159 if ((jam >= START_LAMPU) && (jam < FINISH_LAMPU))
160 // nyala jam >= 8 jam < 19
161 {
162 digitalWrite(relay4, HIGH);
163 Serial.println("Lampu nyala, ");
164 isLampAvailable = "true";
165 } else {
166 digitalWrite(relay4, LOW);
167 Serial.println("Lampu mati, ");
168 isLampAvailable = "false";
169 }
```




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```
169 void pakan() {
170   String FORMAT_JAM = String(jam) + ":" + String(menit);
171   Serial.println(FORMAT_JAM);
172   if (mode == "AUTO" && (jam == START_MAKAN_JAM &&
173     (menit == START_MAKAN_MENIT) && (detik >= START_MAKAN_DETIK_AWAL) &&
174     (detik < START_MAKAN_DETIK_AKHIR)) {
175     isMakan = true;
176     makanTimeStam = millis();
177     Serial.println("Buka");
178     servoMotor.write(0);
179   }
180   if (mode == "AUTO" && (jam == START_MAKAN_JAM2) &&
181     (menit == START_MAKAN_MENIT) && (detik >= START_MAKAN_DETIK_AWAL) &&
182     (detik < START_MAKAN_DETIK_AKHIR)) {
183     isMakan = true;
184     makanTimeStam = millis();
185     Serial.println("Buka");
186     servoMotor.write(0);
187   }
188
189   if (mode == "MANUAL") {
190     if (jam1 == FORMAT_JAM && (detik >= START_MAKAN_DETIK_AWAL) &&
191       (detik < START_MAKAN_DETIK_AKHIR)) {
192       isMakan = true;
193       makanTimeStam = millis();
194       Serial.println("Buka");
195       servoMotor.write(0);
196     }
197     String jam2 = readFromEEPROM(20);
198     if (jam2 == FORMAT_JAM && (detik >= START_MAKAN_DETIK_AWAL) &&
199       (detik < START_MAKAN_DETIK_AKHIR)) {
200       isMakan = true;
201       makanTimeStam = millis();
202       Serial.println("Buka");
203       servoMotor.write(0);
204     }
205   }
206   if (isMakan && millis() > makanTimeStam + lamaBuka) {
207     Serial.println("Tutup");
208     servoMotor.write(100);
209     isMakan = false;
210   }
211 }
212
213 void LCD() {
214   // Variable PAYLOAD LCD
215   // Format = Temp#Hum#isfoodavailable#iswateravailable
216   // String displayjam = String(jam) + ":" + String(menit);
217   String payload = dataIN; // diganti dataIN;
218   String foodavailable = stringSplitter(payload, '#', 2);
219   String wateravailable = stringSplitter(payload, '#', 3);
220   String temperature = stringSplitter(payload, '#', 0);
221   String humidity = stringSplitter(payload, '#', 1);
222   if (StatusAlat == "true") {
223     switch (displayCondition) {
224       case 1:
225         lcd.setCursor(0, 0);
226         lcd.print("ID ALAT: " + dataId);
227         lcd.setCursor(0, 1);
228         if (foodavailable == "true") {
229           lcd.print("MAKAN TERSEDIA");
230         }
231         if (foodavailable == "false") {
232           lcd.print("MAKAN HABIS");
233         }
234         break;
235       case 2:
236         lcd.setCursor(0, 0);
237         lcd.print("ID ALAT: " + dataId);
238         lcd.setCursor(0, 1);
239         if (wateravailable == "true") {
240           lcd.print("AIR TERSEDIA");
241         }
242         if (wateravailable == "false") {
243           lcd.print("AIR HABIS");
244         }
245         break;
246       case 3:
247         lcd.setCursor(0, 0);
248         lcd.print("ID ALAT: " + dataId);
249         lcd.setCursor(0, 1);
250         lcd.print("TEMP: " + temperature + "C");
251         break;
252       case 4:
253         lcd.setCursor(0, 0);
254         lcd.print("ID ALAT: " + dataId);
255         lcd.setCursor(0, 1);
256         lcd.print("HUM: " + humidity + "%");
257         break;
258       default:
259         break;
260     }
261   }
262   if (displayCondition > 5) {
263     displayCondition = 1;
264   }
265   if (StatusAlat == "false") {
266     lcd.setCursor(0, 0);
267     lcd.print("ID ALAT: " + dataId);
268     lcd.setCursor(0, 1);
269     lcd.print("PIN ALAT: " + dataPin);
270   }
271 }
272
273 void setup() {
274   Serial.begin(9600);
275   Serial2.begin(9600, SERIAL_8N1, 16, 17); // RX,TX
276   EEPROM.begin(512);
277   // LCD
278   lcd.init();
279   lcd.backlight();
280   // Servo
281   servoMotor.attach(SERVO_PIN);
282   servoMotor.write(100);
283   // Wifi Manager
284   WiFiManager wm;
285   bool res;
286
287   pinMode(relay4, OUTPUT);
288   pinMode(LED, OUTPUT);
289   digitalWrite(LED, LOW);
290
291   // Alamat 1: MODE
292   // Alamat 2: JAM-1
293   // Alamat 3: JAM-2
294
295   mode = readFromEEPROM(1);
296   jam1 = readFromEEPROM(10);
297   jam2 = readFromEEPROM(20);
298   dataId = readFromEEPROM(50);
299   dataPin = readFromEEPROM(70);
300   StatusAlat = readFromEEPROM(80);
301
302   Serial.print("MODE: ");
303   Serial.println(readFromEEPROM(1));
304   Serial.print("JAM -1: ");
305   Serial.println(readFromEEPROM(10));
306   Serial.print("JAM -2: ");
307   Serial.println(readFromEEPROM(20));
308   Serial.print("Status Alat: ");
309   Serial.println(readFromEEPROM(80));
310
311   res = wm.autoConnect("AutoConnectAP", "password");
312   if (!res) {
313     Serial.println("Failed to connect");
314   } else {
315     Serial.println("connected...yeey :)");
316   }
317
318   if (!rtc.begin()) {
319     Serial.println("Couldn't find RTC");
320     while (1)
321       ;
322   }
323 }
```



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```
346 if (rtc.lostPower()) {
347   Serial.println("RTC lost power, lets set the time!");
348   // rtc.adjust(DateTime(F(__DATE__), F(__TIME__)));
349   // following line sets the RTC to the date & time this sketch was compiled
350
351   // rtc.adjust(DateTime(2014, 1, 21, 3, 0, 0));
352   // This line sets the RTC with an explicit date & time, for example to
353   // set
354 }
355 Serial.println("Waiting Data");
356
357 Serial.print("Status EEPROM: ");
358 // // float TestAddress;
359 // // EEPROM.get(0, TestAddress);
360
361 if (dataId == "" || dataPin == "") {
362   Serial.print("EEPROM Kosong");
363   DeviceId("/device/initialization");
364 }
365
366 else {
367   Serial.println("EEPROM isi");
368   Serial.print("Isi EEPROM Adalah = ");
369   Serial.println(dataId);
370   Serial.println(dataPin);
371 }
372 // MQTT
373 connectToMqtt();
374 }
375
376 void loop() {
377   String data = dataId + "M" + dataIN + "M" + isLampAvailable;
378   Serial.println(data);
379   const char* msgchar = data.c_str();
380   serial();
381   lampu();
382   pakan();
383   LCD();
384
385   if (!mqttClient.connected()) {
386     connectToMqtt();
387   }
388   mqttClient.loop();
389
390   long now = millis();
391   if (now - lastmsg > 1000) {
392     lastmsg = now;
393     snprintf(msg, 75, "%s", msgchar);
394     Serial.println("Publish Message: ");
395     Serial.println(msgchar);
396     String TopicPublishToServer = "TERRARIUM/PUBLISH/" + dataId;
397     const char* TopicPublishToServer_CHR = TopicPublishToServer.c_str();
398     if (StatusAlat == "true") {
399       mqttClient.publish(TopicPublishToServer_CHR, msgchar);
400     }
401     // delete[] data;
402   }
403 }
404
405 // function connect to MQTT with PubSubClient Library
406 void connectToMqtt() {
407   String TopicSchedule = "TERRARIUM/SCHEDULE/" + dataId;
408   String TopicStatusPair = "TERRARIUM/STATUS/" + dataId;
409   String TopicPublishToServer = "TERRARIUM/PUBLISH/" + dataId;
410   const char* TopicSchedule_CHR = TopicSchedule.c_str();
411   const char* TopicStatusPair_CHR = TopicStatusPair.c_str();
412   const char* TopicPublishToServer_CHR = TopicPublishToServer.c_str();
413   mqttClient.setServer(mqttServer, mqttPort);
414   mqttClient.setCallback(callback);
415   while (!mqttClient.connected()) {
416     Serial.println("Connecting to PubSubClient MQTT...");
417
418     if (mqttClient.connect("PNJ/ESP32/test", mqttUser, mqttPassword)) {
419       Serial.println("Connected to PubSubClient MQTT broker");
420
421       // Subscribe to the desired topic
422       mqttClient.subscribe(TopicSchedule_CHR);
423       mqttClient.subscribe(TopicStatusPair_CHR);
424
425     } else {
426       Serial.print("Failed to connect to MQTT broker, state: ");
427       Serial.println(mqttClient.state());
428       delay(2000);
429     }
430   }
431 }
432
433 // callback function to retrieve payload from MQTT
434 void callback(char* topic, byte* payload, unsigned int length) {
435   Serial.println("Message arrived in topic: " + String(topic));
436   String SubsKontrol = "";
437
438   // Serial.print("Message: ");
439   for (int i = 0; i < length; i++) {
440     SubsKontrol += (char)payload[i];
441     // Serial.print((char)payload[i]);
442   }
443   String TopicSchedule = "TERRARIUM/SCHEDULE/" + dataId;
444   String TopicStatusPair = "TERRARIUM/STATUS/" + dataId;
445   String TopicPublishToServer = "TERRARIUM/PUBLISH/" + dataId;
446
447   if (TopicSchedule == topic) {
448     Serial.print("Perintah Masuk: ");
449     Serial.println(SubsKontrol);
450     String JamPakan1 = stringSplitter(SubsKontrol, "M", 0);
451     String JamPakan2 = stringSplitter(SubsKontrol, "M", 1);
452     String StatusMode = stringSplitter(SubsKontrol, "M", 2);
453     mode = StatusMode;
454     Serial.printf("Status Makan : %s\n", StatusMode);
455     writeToEEPROM(1, mode);
456     jam1 = JamPakan1;
457     Serial.printf("Jam 1 : %s\n", JamPakan1);
458     jam2 = JamPakan2;
459     writeToEEPROM(10, jam1);
460     Serial.printf("Jam 2 : %s\n", JamPakan2);
461     writeToEEPROM(20, jam2);
462   }
463   if (TopicStatusPair == topic) {
464     String StatusPair = SubsKontrol;
465     StatusAlat = StatusPair;
466     writeToEEPROM(80, StatusAlat);
467   }
468 }
```

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Hasil Wawancara

Narasumber : Pak Agam

Tempat : Online (Facebook)

Waktu : 26 Juni 2023

Keterangan :

P = Penanya

N = Narasumber

P	Sekiranya dalam perawatan bearded dragon apa saja ya mas yang harus diperhatikan? khususnya untuk bearded dragon yang masih baby
N	Untuk baby lebih di perhatikan suhu dan kelembapan dalam terrarium, tiap pagi jemur dan direndam (3-5x dalam seminggu) ,dan pemberian pakan yang konsisten setiap harinya. kalau boleh tau buat judul skripsi apa ya ?
P	Untuk judul skripsi yang saya bawaan adalah "rancang bangun smart terrarium untuk reptil bearded dragon berbasis internet of things" jadi saya akan membuat alat untuk membantu melakukan pemeliharaan pada bearded dragon, mulai dari pakan dan lampu terjadwal, pengaturan suhu pada terrarium dan juga ada air minum otomatisnya. Dan disini saya melakukan wawancara singkat dengan mas untuk memvalidasi bahwa alat yang saya buat benar dapat membantu para pemilik bearded dragon untuk merawatnya mas. Menurut mas apakah alat tersebut sekiranya dapat membantu mas dalam melakukan perawatan bearded dragon mas ?
N	Bisa mas sangat membantu, apalagi dalam situasi tertentu seperti pada saat kita bakal keluar kota dalam jangka waktu lama.

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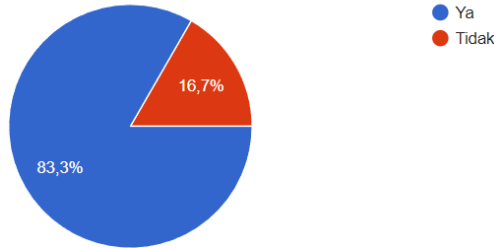
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Data untuk kebutuhan untuk memvalidasi rancangan dan fitur yang ada pada Rancang Bangun Smart Terrarium untuk Reptil Bearded Dragon berbasis Internet of Things.

Apakah anda pernah memelihara hewan dengan jenis reptil?

Salin

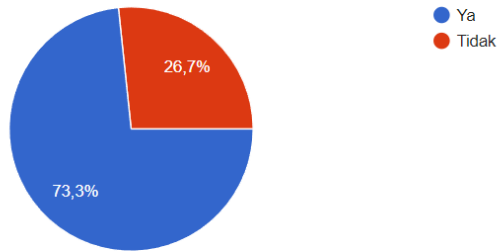
30 jawaban



Apakah anda pernah memelihara reptil berjenis Bearded Dragon ?

Salin

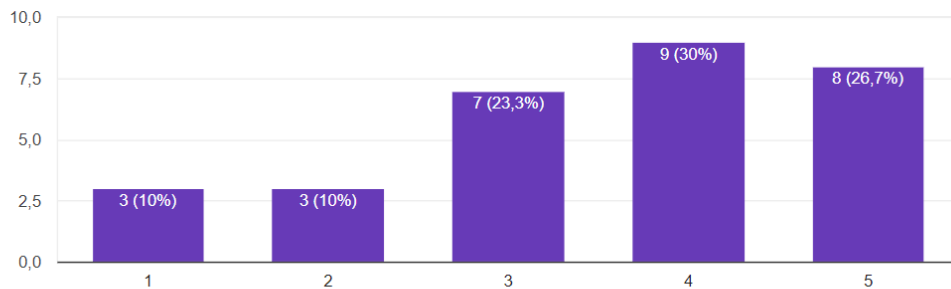
30 jawaban



Bagaimana pendapat anda tentang proses pemeliharaan dan perawatan bearded dragon, apakah sulit untuk dilakukan?

Salin

30 jawaban





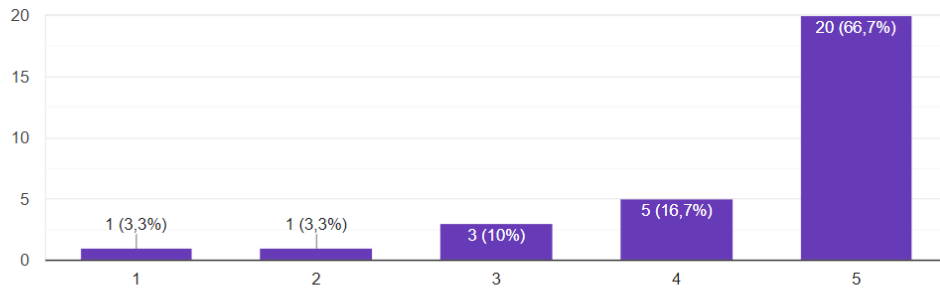
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Menurut anda, apakah fitur lampu UVA/UVB secara terjadwal pada terrarium dapat membantu anda dalam proses perawatan bearded dragon?

[Salin](#)

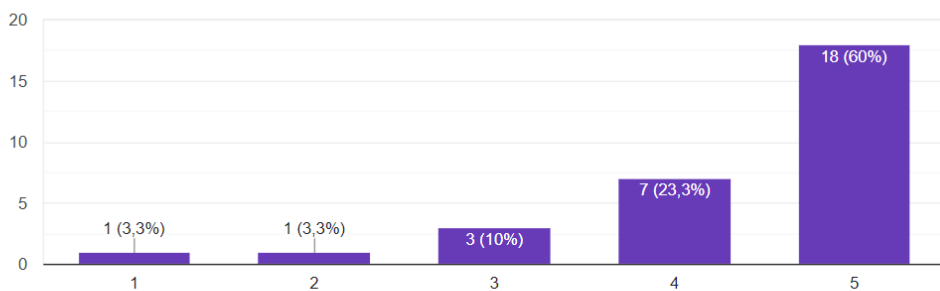
30 jawaban



Bagaimana pendapat anda tentang fitur pemanas dan pendingin otomatis pada terrarium, apakah fitur tersebut dapat membantu anda dalam perawatan bearded dragon?

[Salin](#)

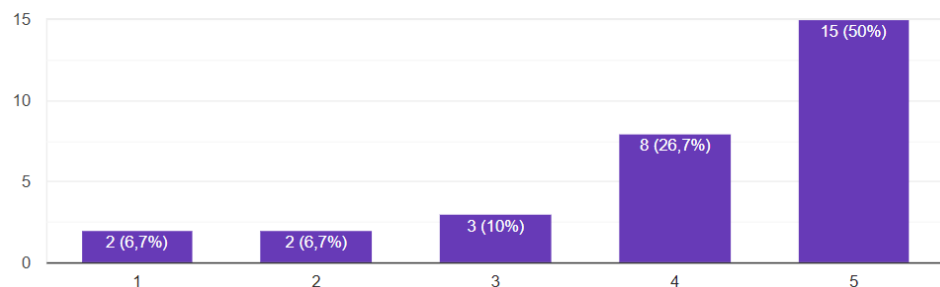
30 jawaban



Menurut anda, apakah fitur air minum otomatis dapat membantu anda dalam pelaksanaan perawatan bearded dragon?

[Salin](#)

30 jawaban





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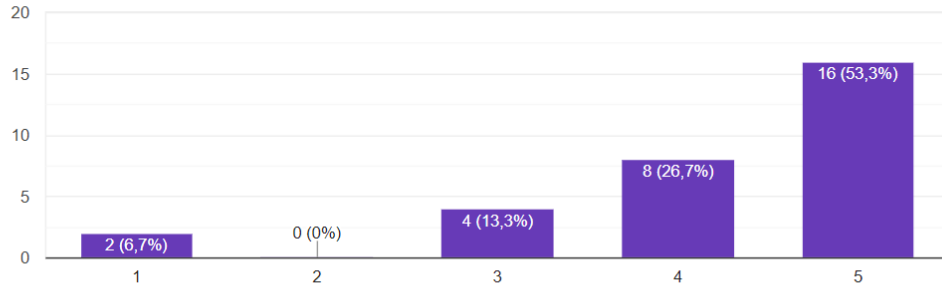
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Bagaimana pendapat anda tentang fitur pakan terjadwal yang dapat dijadwalkan secara otomatis maupun manual oleh user sendiri, apakah fitur tersebut dapat membantu anda dalam proses perawatan bearded dragon?

Salin

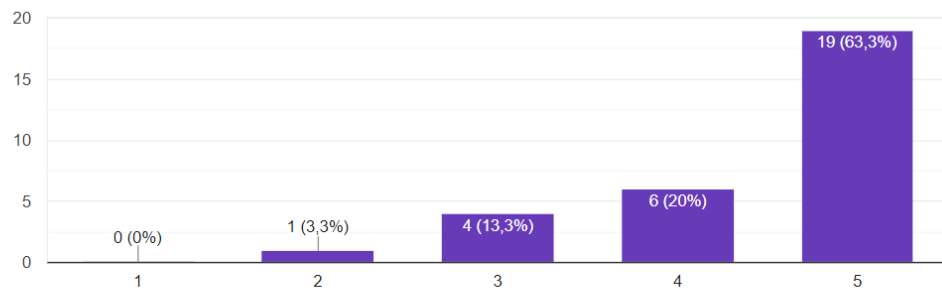
30 jawaban



Menurut anda, apakah aplikasi berbentuk website dapat membantu anda untuk melakukan monitoring status pada terrarium ?

Salin

30 jawaban



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Database Durabilitas 2 Jam

1	id,"temp","humid","uv","food","drink","deviceld","createdAt","updatedAt"
2	clj5a0sd5000tz54yivh004t,"34.50","68.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:31:14.202","2023-06-21 05:31:14.202"
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4	clj5a232e000tz54t2dfzfqog,"34.50","68.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:32:14.726","2023-06-21 05:32:14.726"
5	clj5a2qye000tz54o2i6dwzi,"34.60","67.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:32:45.686","2023-06-21 05:32:45.686"
6	clj5a3emw000tz54g0byr5fq,"34.60","68.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:33:16.377","2023-06-21 05:33:16.377"
7	clj5a423k000atz54v2pj5xbh,"34.50","68.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:33:46.791","2023-06-21 05:33:46.791"
8	clj5a4q0r000ctz54dd73f044,"34.60","68.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:34:17.787","2023-06-21 05:34:17.787"
9	clj5a5d77000etz542408016r,"34.60","68.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:34:47.828","2023-06-21 05:34:47.828"
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13	clj5a7zer000mtz54toftvidv9,"34.50","68.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:36:49.923","2023-06-21 05:36:49.923"
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15	clj5a9ac9000qtz54f7g7mez,"34.50","68.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:37:50.745","2023-06-21 05:37:50.745"
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18	clj5ab8w2000wtz54y3ppqvr2,"34.50","69.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 05:39:22.178","2023-06-21 05:39:22.178"
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244	clj5ef3ef00dgtz54suuh1392,"35.10","65.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 07:34:20.151","2023-06-21 07:34:20.151"
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247	clj5eh1s800dmtz54fpo060s,"34.90","65.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 07:35:51.368","2023-06-21 07:35:51.368"
248	clj5ehpqw000dtz54wpkjt2xy,"34.90","65.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-21 07:36:22.425","2023-06-21 07:36:22.425"

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 - Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
- Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

L4 – Database Pengujian Durabilitas

Database Durabilitas 4 Jam

A	
id,"temp","humd","uv","food","drink","deviceld","createdAt","updatedAt"	
1	id,"temp","humd","uv","food","drink","deviceld","createdAt","updatedAt"
2	clj6lhbby0000t24w4ypb9412,"32.00","77.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:35:15.071","2023-06-22 03:35:15.071"
3	clj6lc4vd0002t24wdb1rjtb7,"32.10","77.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:35:45.577","2023-06-22 03:35:45.577"
4	clj6lcs98000t24w3a3f5a7,"32.20","76.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:36:16.136","2023-06-22 03:36:16.136"
5	clj6ldg0p0006t24wblspyq8q,"32.30","76.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:36:46.682","2023-06-22 03:36:46.682"
6	clj6le38y0008t24whkhw1xf,"32.30","76.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:37:16.787","2023-06-22 03:37:16.787"
7	clj6leqig000atz4w95fdbh5,"32.40","75.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:37:46.936","2023-06-22 03:37:46.936"
8	clj6lfdxc000ctz4wjllnxs,"32.40","76.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:38:17.280","2023-06-22 03:38:17.280"
9	clj6lg19000etz4wm9ts7b7p,"32.50","75.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:38:47.949","2023-06-22 03:38:47.949"
10	clj6lGPC1000gtz4w5kqxrwmT,"32.60","75.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:39:18.721","2023-06-22 03:39:18.721"
11	clj6lhcxx000it24wv4sflu2i,"32.60","75.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:39:49.317","2023-06-22 03:39:49.317"
12	clj6li08t000ktz4w7cz4553m,"32.60","75.50","1","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:40:19.518","2023-06-22 03:40:19.518"
13	clj6lio40000mtz4wxanxruha,"32.60","75.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:40:50.449","2023-06-22 03:40:50.449"
14	clj6lijbk9000t24w3wiwoj3e,"32.60","75.00","1","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:41:20.842","2023-06-22 03:41:20.842"
15	clj6lijzam0000t24wvc4lg8hl,"32.60","75.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:41:51.599","2023-06-22 03:41:51.599"
16	clj6lknbc000stz4wfvlvfuyy,"32.70","74.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:42:22.729","2023-06-22 03:42:22.729"
17	clj6llbao000utz4w3kpio1v7,"32.80","74.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:42:53.809","2023-06-22 03:42:53.809"
18	clj6llj9000wtz4w68opbxf,"32.90","74.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:43:23.998","2023-06-22 03:43:23.998"
19	clj6lmmb0000ytz4w6liiuv3x6,"33.00","73.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:43:54.732","2023-06-22 03:43:54.732"
20	clj6lnr30010t24w5fwh0j5,"33.00","73.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:44:25.120","2023-06-22 03:44:25.120"
21	clj6lnxr70012t24wcbqxnC0,"32.90","74.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:44:56.228","2023-06-22 03:44:56.228"
22	clj6llokyc0014t24w4jouiql,"32.90","73.90","1","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:45:26.294","2023-06-22 03:45:26.294"
23	clj6lP8md0016t24wuado9mz9,"32.80","74.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:45:56.965","2023-06-22 03:45:56.965"
24	clj6lpw4r0018t24w2fz1oem,"32.70","74.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:46:27.436","2023-06-22 03:46:27.436"
25	clj6lqjo2001atz4wxq4perfd,"32.70","74.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:46:57.938","2023-06-22 03:46:57.938"
26	clj6lr74u001ctz4wz8vos8vx,"32.70","74.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:47:28.351","2023-06-22 03:47:28.351"
27	clj6lrucc001etz4wjs30b56f,"32.70","74.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:47:58.445","2023-06-22 03:47:58.445"
28	clj6lshjt001gtz4wz4rjq98a,"32.80","74.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:48:28.505","2023-06-22 03:48:28.505"
29	clj6lit5eb001it24w4ld5noi76,"32.90","73.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 03:48:59.411","2023-06-22 03:48:59.411"
169	clj6ocrr2009atz4wvhobyfto,"35.10","63.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:00:14.078","2023-06-22 05:00:14.078"
170	clj6odfcl009ctz4w6gr4ybb7,"35.10","63.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:00:44.662","2023-06-22 05:00:44.662"
171	clj6oe2t1009etz4w2h0mq2el,"35.00","63.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:01:15.061","2023-06-22 05:01:15.061"
172	clj6oeqa5009gtz4w4ur4t8j5r,"34.90","64.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:01:45.485","2023-06-22 05:01:45.485"
173	clj6ofldr009itz4w4y19toz2,"34.90","64.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:02:15.711","2023-06-22 05:02:15.711"
174	clj6og1b4009t24w4drc5c2il,"34.90","64.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:02:46.432","2023-06-22 05:02:46.432"
175	clj6ogom3009mtz4w4qhl0e5q8,"35.10","64.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:03:16.635","2023-06-22 05:03:16.635"
176	clj6ohbss0009atz4wd1j65lbt,"35.20","64.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:03:46.684","2023-06-22 05:03:46.684"
177	clj6ohz3n009qtz4w4bsc4lhyS,"35.30","62.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:04:16.883","2023-06-22 05:04:16.883"
178	clj6oimks009stz4w4wemdgozej,"35.30","63.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:04:47.309","2023-06-22 05:04:47.309"
179	clj6ojja37009utz4w7kzdevyj,"35.20","63.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:05:17.780","2023-06-22 05:05:17.780"
180	clj6ojxis009wtz4w4y4x1szj,"35.20","63.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:05:48.148","2023-06-22 05:05:48.148"
181	clj6okkw5009ytz4w4gwdzgy5,"35.20","63.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:06:18.437","2023-06-22 05:06:18.437"
182	clj6ol8bj00atz4w4xkxnos5u,"35.40","63.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:06:48.800","2023-06-22 05:06:48.800"
183	clj6olvra000a2t24w2yww0b6,"35.50","62.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:07:19.174","2023-06-22 05:07:19.174"
184	clj6omjC700a4t24w4p7ew6l,"35.50","62.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:07:49.735","2023-06-22 05:07:49.735"
185	clj6on6ns000a6t24w4n9z2ky7,"35.50","62.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:08:19.961","2023-06-22 05:08:19.961"
186	clj6onuht000a2t24w4x514h8mb,"35.40","62.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:08:50.849","2023-06-22 05:08:50.849"
187	clj6ooifq000atz4w7rfmchs4,"35.30","62.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:09:21.878","2023-06-22 05:09:21.878"
188	clj6op68700actz4w4x6k8x4r,"35.10","63.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:09:52.711","2023-06-22 05:09:52.711"
189	clj6optkp00aetz4w4n1052uj,"35.10","63.50","1","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:10:22.970","2023-06-22 05:10:22.970"
190	clj6oqhe000agt24w4wuw7lmlg,"35.10","63.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:10:53.833","2023-06-22 05:10:53.833"
191	clj6or5a300aitz4w4y5onyv2c,"35.10","63.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:11:24.796","2023-06-22 05:11:24.796"
192	clj6orskl00aktz4wt3lmqhS,"35.20","63.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:11:54.981","2023-06-22 05:11:54.981"
193	clj6osg300amtz4w4g9ezvr8m,"35.30","63.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:12:25.780","2023-06-22 05:12:25.780"
194	clj6ot3ok000aetz4w4w9c13avv,"35.40","62.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:12:56.036","2023-06-22 05:12:56.036"
195	clj6otrap000aqtz4w6tz89vwb,"35.50","62.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:13:26.642","2023-06-22 05:13:26.642"
196	clj6ouex600astz4w4wakfe0ua,"35.60","62.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:13:57.258","2023-06-22 05:13:57.258"
197	clj6ov2e700autz4w76387r2v,"35.60","62.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 05:14:27.680","2023-06-22 05:14:27.680"

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466	clj6trdvh00pstz4wfg9pdpypc,"35.80","60.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:31:34.014","2023-06-22 07:31:34.014"
467	clj6ts1uj00putz4wtbc1mzf5,"35.80","61.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:32:05.083","2023-06-22 07:32:05.083"
468	clj6tsp000pwtz4wxkeqoaho,"35.90","60.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:32:35.629","2023-06-22 07:32:35.629"
469	clj6tttd0q00pytz4wy30d1g7d,"36.00","60.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:33:06.218","2023-06-22 07:33:06.218"
470	clj6tuofm00qtz4w8ljjcwhq,"36.10","60.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:33:36.563","2023-06-22 07:33:36.563"
471	clj6tunqm00qtz4wxyb3baud,"36.00","60.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:34:06.766","2023-06-22 07:34:06.766"
472	clj6tvb7q00qtz4w8j84w9ea,"36.10","60.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:34:37.190","2023-06-22 07:34:37.190"
473	clj6tvvvg00qtz4w5b1j2bk,"36.20","59.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:35:07.888","2023-06-22 07:35:07.888"
474	clj6twm2700q8t24w8pypc1m6,"36.20","59.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:35:37.903","2023-06-22 07:35:37.903"
475	clj6tx9ou00qtz4w4hyk6op9b,"36.20","60.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:36:08.526","2023-06-22 07:36:08.526"
476	clj6txx8500qtz4wd1jgol8,"36.10","60.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:36:39.029","2023-06-22 07:36:39.029"
477	clj6tyl5y00qet24ws0vhugfi,"35.90","60.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:37:10.055","2023-06-22 07:37:10.055"
478	clj6tz3b00qet24w859dnqj,"35.70","61.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:37:41.064","2023-06-22 07:37:41.064"
479	clj6tzwt00qit24w913bdv6,"35.60","61.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:38:11.820","2023-06-22 07:38:11.820"
480	clj6u0k400qet24w6oaw6l72,"35.70","61.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:38:42.019","2023-06-22 07:38:42.019"
481	clj6u17nb00qmt24w11y9fyp,"35.60","61.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:39:12.504","2023-06-22 07:39:12.504"
482	clj6u1v9u00qet24w8jxste0,"35.60","61.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:39:43.123","2023-06-22 07:39:43.123"
483	clj6u2itk00qet24w1ps9f01,"35.80","60.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:40:13.640","2023-06-22 07:40:13.640"
484	clj6u36iu00qet24wv09tzi,"35.80","60.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:40:44.358","2023-06-22 07:40:44.358"
485	clj6u3trr00qet24w2ybk76k,"35.60","61.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:41:14.488","2023-06-22 07:41:14.488"
486	clj6u4heg00qet24w3sib5cf,"35.40","61.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:41:45.113","2023-06-22 07:41:45.113"
487	clj6u54or00qet24w60ryjnz,"35.30","62.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:42:15.291","2023-06-22 07:42:15.291"
488	clj6u5sjt00rtz4wlo1m1k1y,"35.20","62.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:42:46.217","2023-06-22 07:42:46.217"
489	clj6u6fq00rtz4w7d6dws,"35.30","62.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:43:16.259","2023-06-22 07:43:16.259"
490	clj6u731d00rtz4wq8bczyr,"35.50","62.00","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:43:46.466","2023-06-22 07:43:46.466"
491	clj6u7qf00rtz4w1mazkyzh,"35.60","61.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:44:16.777","2023-06-22 07:44:16.777"
492	clj6u8e4o00rtz4w5cjk6q2c,"35.70","61.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:44:47.497","2023-06-22 07:44:47.497"
493	clj6u922m00ratz4w2iu3v5r,"35.60","61.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-22 07:45:18.526","2023-06-22 07:45:18.526"

Database Durabilitas 8 Jam

1	id,"temp","humd","uv","food","drink","deviceId","createdAt","updatedAt"
2	clj7w2k6r0000tz8jhjrimb98,"34.80","66.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:24:00.820","2023-06-23 01:24:00.820"
3	clj7w37ln0000tz8y5jdsda9,"34.70","66.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:24:31.164","2023-06-23 01:24:31.164"
4	clj7w3uzc0004tz8hbcvsm4t9,"34.60","66.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:25:01.464","2023-06-23 01:25:01.464"
5	clj7w4igy0006tz8hfcsc2tf9y,"34.40","67.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:25:31.906","2023-06-23 01:25:31.906"
6	clj7w56f70008tz8h8ve1wb2h,"34.20","67.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:26:02.948","2023-06-23 01:26:02.948"
7	clj7w5tv8000atz8kolt5l6l,"34.00","67.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:26:33.332","2023-06-23 01:26:33.332"
8	clj7w6hey000ctz8h80tmrxod,"33.80","68.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:27:03.850","2023-06-23 01:27:03.850"
9	clj7w74zb0000etz8o4dgg6iq,"33.70","68.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:27:34.391","2023-06-23 01:27:34.391"
10	clj7w7sxb000gtz8h80k5v2xnr,"33.50","69.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:28:05.424","2023-06-23 01:28:05.424"
11	clj7w8g4d0000itz8s3perlg7,"33.40","69.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:28:35.486","2023-06-23 01:28:35.486"
12	clj7w93tn000ktz8k4tdvfhf,"33.30","69.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:29:06.204","2023-06-23 01:29:06.204"
13	clj7w9r8v000mtz8o4ugsrh5,"33.20","70.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:29:36.559","2023-06-23 01:29:36.559"
14	clj7waewk000otz8h8zllhm7v6,"33.20","70.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:30:07.220","2023-06-23 01:30:07.220"
15	clj7wb2c3000qtz8mqaff1jqh,"33.20","70.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:30:37.587","2023-06-23 01:30:37.587"
16	clj7wbq4e000stz8h8mqvvyjk,"33.20","70.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:31:08.414","2023-06-23 01:31:08.414"
17	clj7wce84000utz8h8ih9u6dtj,"33.20","70.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:31:39.652","2023-06-23 01:31:39.652"
18	clj7wd1lz000wtz8h8pkjne5xy,"33.30","70.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:32:09.959","2023-06-23 01:32:09.959"
19	clj7wdp27000ytz8hpvssly2t,"33.30","69.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:32:40.351","2023-06-23 01:32:40.351"
20	clj7wecj90010tz8h8tdbslcz,"33.30","70.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:33:10.773","2023-06-23 01:33:10.773"
21	clj7wfo0d0012tz8r8oy4c99,"33.40","70.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:33:41.198","2023-06-23 01:33:41.198"
22	clj7wfn20014tz8h8k50m79fa,"33.50","69.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:34:11.462","2023-06-23 01:34:11.462"
23	clj7wgasl0016tz8t5vfy5t,"33.50","69.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:34:41.829","2023-06-23 01:34:41.829"
24	clj7wgyab0018tz8hvzopyeon,"33.50","69.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:35:12.276","2023-06-23 01:35:12.276"
25	clj7whlm6001atz8h8rtifkx,"33.60","69.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:35:42.510","2023-06-23 01:35:42.510"
26	clj7wi933001ctz8h86z6im8i9,"33.50","69.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:36:12.927","2023-06-23 01:36:12.927"
27	clj7ziwvni001etzh87lm6ne0e,"33.50","69.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 01:36:43.471","2023-06-23 01:36:43.471"

- Hak Cipta :**
- Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
 - Pengutipan hanya untuk kepentingan pendidikan, penelitian , penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
 - Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

Hak Cipta :

- 1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
- 2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta

209	clj7zszwe00bitzh83ta3lorm,"34.50","66.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:08:33.086","2023-06-23 03:08:33.086"
210	clj7ztncl00bkztzh8ztpo9va,"34.50","66.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:09:03.475","2023-06-23 03:09:03.475"
211	clj7zuaao00bmtzh85mpmniqg,"34.40","67.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:09:33.936","2023-06-23 03:09:33.936"
212	clj7zuyh00botzh8fcp0m3xb,"34.40","67.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:10:04.570","2023-06-23 03:10:04.570"
213	clj7zvm3z00bqtzh8yqpd30pj,"34.30","67.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:10:35.183","2023-06-23 03:10:35.183"
214	clj7zw9z000bstzh8ioj5vxbc,"34.20","67.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:11:06.133","2023-06-23 03:11:06.133"
215	clj7zwxw700butzh8eppp185s,"34.10","67.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:11:37.147","2023-06-23 03:11:37.147"
216	clj7zxl6200bwtzh8k4x5pye,"34.10","68.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:12:07.275","2023-06-23 03:12:07.275"
217	clj7zy8kz00bytz8geef4s7e,"34.20","68.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:12:37.619","2023-06-23 03:12:37.619"
218	clj7zyw5300ctzh8c3vhbiwa,"34.30","67.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:13:08.152","2023-06-23 03:13:08.152"
219	clj7zjr00ctz8ec5vrstn,"34.40","67.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:13:38.766","2023-06-23 03:13:38.766"
220	clj80078a00c4tz8jw83oq8j,"34.50","66.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:14:09.179","2023-06-23 03:14:09.179"
221	clj800uk00c6tz8dhe0urwx,"34.50","66.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:14:39.439","2023-06-23 03:14:39.439"
222	clj801ibq00c8tz8388wvnjn,"34.60","66.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:15:10.214","2023-06-23 03:15:10.214"
223	clj80263100catzh8dplf0new,"34.50","66.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:15:41.005","2023-06-23 03:15:41.005"
224	clj802t800cctzh86er3uvv7,"34.40","66.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:16:11.468","2023-06-23 03:16:11.468"
225	clj803hf700cetzh837vcpaf2,"34.30","66.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:16:42.355","2023-06-23 03:16:42.355"
226	clj80456s00cotzh87he6kzm,"34.20","66.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:17:13.156","2023-06-23 03:17:13.156"
227	clj804sog00citz82uovzl10,"34.10","67.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:17:43.600","2023-06-23 03:17:43.600"
228	clj805g6i00cktzh8sc5b5m,"34.20","67.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:18:14.059","2023-06-23 03:18:14.059"
229	clj8063hi00cmtzh8cnzd61d6,"34.30","67.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:18:44.262","2023-06-23 03:18:44.262"
230	clj806r1s00cotzh8ot1vqsh,"34.30","66.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:19:14.801","2023-06-23 03:19:14.801"
231	clj807efv00cqtzh8w4sp3gzq,"34.30","66.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:19:45.115","2023-06-23 03:19:45.115"
232	clj8081zu00cstzh8t0q6438,"34.20","67.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:20:15.642","2023-06-23 03:20:15.642"
233	clj808pgd00cutzh8h314jai,"34.20","67.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:20:46.046","2023-06-23 03:20:46.046"
234	clj809cra00ctzh8ccfkzrgu,"34.30","67.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:21:16.246","2023-06-23 03:21:16.246"
235	cli80a06l00cvtzh85ivb763,"34.40","66.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 03:21:46.605","2023-06-23 03:21:46.605"
419	clj83mduy00n6tz8520jkbfr,"35.20","65.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:55:23.190","2023-06-23 04:55:23.190"
420	clj83n1qz00n8tz8hv4orvt7t,"35.20","65.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:55:54.012","2023-06-23 04:55:54.012"
421	clj83nplc00natzh8a5k509n6,"35.30","65.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:56:24.598","2023-06-23 04:56:24.598"
422	clj833cw500cctzh8hctwxk31,"35.40","65.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:56:55.109","2023-06-23 04:56:55.109"
423	clj83p0d800netzh8eouwkmc,"35.40","65.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:57:25.532","2023-06-23 04:57:25.532"
424	clj83po6600ngtzh8mp2or93m,"35.40","65.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:57:56.383","2023-06-23 04:57:56.383"
425	clj83qbn00n0itzh8eko15k4p,"35.40","65.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:58:26.796","2023-06-23 04:58:26.796"
426	clj83qz2s00nktzh8gs9v65ep,"35.40","64.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:58:57.173","2023-06-23 04:58:57.173"
427	clj83rmpa00nmtzh8h5nt8vb5,"35.50","64.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:59:27.791","2023-06-23 04:59:27.791"
428	clj83sa2i00notzh8grhyx5bl,"35.50","63.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 04:59:58.075","2023-06-23 04:59:58.075"
429	clj83sxn200nqtzh8f4yfx47,"35.50","63.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:00:28.656","2023-06-23 05:00:28.656"
430	clj83tla00nstzh819mehv6a,"35.50","63.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:00:59.271","2023-06-23 05:00:59.271"
431	clj83u8nf00nutzh8ou18pxlo,"35.50","63.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:01:29.547","2023-06-23 05:01:29.547"
432	clj83uw6w00nwtzh8nc1itnzl,"35.50","63.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:02:00.056","2023-06-23 05:02:00.056"
433	clj83vjin00nytz8h668hc58k,"35.50","63.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:02:30.476","2023-06-23 05:02:30.476"
434	clj83w74n00otzh82m77chuf,"35.50","63.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:03:00.888","2023-06-23 05:03:00.888"
435	clj83wugl00o2tz8h0h6slbxa,"35.50","63.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:03:31.125","2023-06-23 05:03:31.125"
436	clj83xho00o4tz89aaml6vm,"35.50","63.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:04:01.200","2023-06-23 05:04:01.200"
437	clj83y4z700o6tz82kbwm7ta,"35.50","63.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:04:31.412","2023-06-23 05:04:31.412"
438	clj83ysl00o8tz8h8ycutakqw,"35.50","63.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:05:02.034","2023-06-23 05:05:02.034"
439	clj83zg6800oatz8h36a8our,"35.40","64.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:05:32.577","2023-06-23 05:05:32.577"
440	clj83zg6900octzh8kwgmdf2b,"35.40","64.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:05:32.577","2023-06-23 05:05:32.577"
441	clj8403hi00oetz8h6l3mfjht,"35.20","64.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:06:02.790","2023-06-23 05:06:02.790"
442	clj840r3z00ogtzh8t4utw797,"35.10","64.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:06:33.408","2023-06-23 05:06:33.408"
443	clj841esb00oitz8snxi16fh,"35.10","65.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:07:04.091","2023-06-23 05:07:04.091"
444	clj84227a00oktzh8d0fu2pho,"35.00","65.30","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:07:34.438","2023-06-23 05:07:34.438"
445	cli842nau00nmtzh8anovddoh,"34.90","65.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 05:08:04.950","2023-06-23 05:08:04.950"



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

L4 – Database Pengujian Durabilitas

940	clj8cxy601g4tz84fm760nf,"36.50","58.90","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:16:20.106","2023-06-23 09:16:20.106"
941	clj8cym8001g6tzh8yp3kb07c,"36.50","59.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:16:50.329","2023-06-23 09:16:50.329"
942	clj8cz9t801g8tz8sschq99h,"36.40","59.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:17:20.877","2023-06-23 09:17:20.877"
943	clj8czx7301gatzh8u4k7qj8,"36.30","59.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:17:51.184","2023-06-23 09:17:51.184"
944	clj8d0kj001gctzh8shwii4rw,"36.30","59.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:18:21.420","2023-06-23 09:18:21.420"
945	clj8d18ar001gctzh8f6fc3oyc,"36.30","59.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:18:52.227","2023-06-23 09:18:52.227"
946	clj8d1w7k01ggzh86okr9p5,"36.30","59.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:19:23.216","2023-06-23 09:19:23.216"
947	clj8d2jg01gitzh888utkgrk,"36.10","59.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:19:53.349","2023-06-23 09:19:53.349"
948	clj8d372v01gktzh85c74l63z,"36.00","59.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:20:23.959","2023-06-23 09:20:23.959"
949	clj8d3upe001gmtzh84bbimzoh,"35.90","60.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:20:54.578","2023-06-23 09:20:54.578"
950	clj8d4ib401gotzh88gqz9p5,"36.30","60.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:21:25.169","2023-06-23 09:21:25.169"
951	clj8d566901gqzh8z7umg1fz,"36.10","59.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:21:56.097","2023-06-23 09:21:56.097"
952	clj8d5tpr001gstzh8wa2keawv,"36.20","59.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:22:26.608","2023-06-23 09:22:26.608"
953	clj8d6h8301gutz8szs2n9il,"36.30","59.40","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:22:57.075","2023-06-23 09:22:57.075"
954	clj8d74j01gotzh88gqz9p5,"36.30","59.20","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:23:27.287","2023-06-23 09:23:27.287"
955	clj8d7r2v01gqztzh8p6qnl6dp,"36.40","59.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:23:57.691","2023-06-23 09:23:57.691"
956	clj8d8fz01h0tzh8kboe5db6,"36.30","59.10","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:24:28.187","2023-06-23 09:24:28.187"
957	clj8d92w001hatzh8i9xs0yzt,"36.20","59.50","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:24:58.464","2023-06-23 09:24:58.464"
958	clj8d9q2101h4tzh853t9eb1y,"36.30","60.00","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:25:28.489","2023-06-23 09:25:28.489"
959	clj8dad0s01h6tzh80qz5sci0,"36.30","59.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:25:59.117","2023-06-23 09:25:59.117"
960	clj8db1ac01h8tzh8j94ycmxr,"36.30","59.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:26:29.700","2023-06-23 09:26:29.700"
961	clj8dbp4e01hatzh8endaaswd,"36.40","59.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:27:00.590","2023-06-23 09:27:00.590"
962	clj8dccva01hctzh8jydp3r4,"36.40","59.60","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:27:31.366","2023-06-23 09:27:31.366"
963	clj8dd0m701hctzh8p8bkqpyh,"36.30","59.80","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:28:02.143","2023-06-23 09:28:02.143"
964	clj8ddnvn01hgtzh8u43xepew,"36.30","59.70","1","1","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:28:32.292","2023-06-23 09:28:32.292"
965	clj8debr401hitzh849z88eg7,"36.30","59.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-23 09:29:03.232","2023-06-23 09:29:03.232"

Database Durabilitas 12 Jam

1	id,"temp","humd","uv","food","drink","deviceId","createdAt","updatedAt"
2	clja5bj8p0000tz4cja07m2iq,"32.40","72.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:18:28.393","2023-06-24 15:18:28.393"
3	clja5c6rr0000tz4czcdupog0,"32.40","72.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:18:58.887","2023-06-24 15:18:58.887"
4	clja5cum80000tz4c4jprnmvnb,"32.40","72.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:19:29.792","2023-06-24 15:19:29.792"
5	clja5dih0000tz4cmshay7ll,"32.40","73.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:20:00.737","2023-06-24 15:20:00.737"
6	clja5e5py0000tz4cp4h5slyo,"32.40","73.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:20:30.838","2023-06-24 15:20:30.838"
7	clja5etc50000tz4cvdsi7vwu,"32.30","73.20","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:21:01.445","2023-06-24 15:21:01.445"
8	clja5fh7f0000tz4cxh2w6vaz,"32.30","73.30","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:21:32.379","2023-06-24 15:21:32.379"
9	clja5g4fl0000tz4cpsy5h0cbo,"32.30","73.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:22:02.482","2023-06-24 15:22:02.482"
10	clja5gsfi0000tz4cs1chxsek,"32.40","73.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:22:33.583","2023-06-24 15:22:33.583"
11	clja5hfoq0000tz4c1lbae0b,"32.40","73.30","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:23:03.722","2023-06-24 15:23:03.722"
12	clja5i3ge20000tz4c0kx2lgh,"32.50","73.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:23:34.515","2023-06-24 15:23:34.515"
13	clja5irbs0000tz4csl2hp0i3,"32.50","73.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:24:05.465","2023-06-24 15:24:05.465"
14	clja5jehe0000tz4czs4faj28,"32.50","72.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:24:35.474","2023-06-24 15:24:35.474"
15	clja5k2e80000tz4cptekxzkz,"32.50","72.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:25:06.464","2023-06-24 15:25:06.464"
16	clja5kqak0000tz4ch6k10edo,"32.50","72.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:25:37.437","2023-06-24 15:25:37.437"
17	clja5ldlh0000tz4cxjacg44b,"32.50","72.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:26:07.638","2023-06-24 15:26:07.638"
18	clja5m12o0000tz4c2oavy7hl,"32.50","72.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:26:38.064","2023-06-24 15:26:38.064"
19	clja5mp0r0000tz4cjueqfsjb,"32.50","72.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:27:09.100","2023-06-24 15:27:09.100"
20	clja5ncpf0010tz4cswpizjkg,"32.40","72.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:27:39.795","2023-06-24 15:27:39.795"
21	clja5o0q40012tz4c0luehtu8,"32.40","73.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:28:10.924","2023-06-24 15:28:10.924"
22	clja5ool60014tz4ce4wu8,"32.30","73.20","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:28:41.850","2023-06-24 15:28:41.850"
23	clja5pcc00016tz4c4jgkufxm5,"32.30","73.30","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:29:12.638","2023-06-24 15:29:12.638"
24	clja5q07g0018tz4c8o2ywfpr,"32.30","73.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:29:43.564","2023-06-24 15:29:43.564"
25	clja5qo8v001at4cjuf9p5rs,"32.20","73.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:30:14.720","2023-06-24 15:30:14.720"
26	clja5rbm4001ctz4c023d3f9,"32.20","73.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:30:45.005","2023-06-24 15:30:45.005"
27	clja5ryxk001etz4ctwkyn5yd,"32.20","73.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-24 15:31:15.224","2023-06-24 15:31:15.224"

- Hak Cipta :**
1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
 2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

Hak Cipta :

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
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281	cljaaedu700fzt4ccqfjcy9c,"31.70","73.00","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:40:39.440","2023-06-24 17:40:39.440"
282	cljaaf1j400ftz4c4vz962t4g,"31.70","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:41:10.145","2023-06-24 17:41:10.145"
283	cljaafpb700fz4c4cymkn1nrg,"31.70","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:41:40.962","2023-06-24 17:41:40.962"
284	cljaagc1k00fotz4c9fyqe19w,"31.70","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:42:11.036","2023-06-24 17:42:11.036"
285	cljaagznz00fzt4c2j7qai3x,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:42:41.039","2023-06-24 17:42:41.039"
286	cljaahnsb00fzt4c4skyfla0c,"31.70","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:43:12.299","2023-06-24 17:43:12.299"
287	cljaabhp00fzt4c4cm4g0ha6,"31.60","73.00","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:43:43.022","2023-06-24 17:43:43.022"
288	cljaaiza700fvzt4c4ffve3rxr,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:44:13.855","2023-06-24 17:44:13.855"
289	cljaajmnz00fvtz4c2n2nif6y9,"31.70","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:44:44.160","2023-06-24 17:44:44.160"
290	cljaakag700gtz4c4q24z1wha,"31.60","73.00","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:45:14.983","2023-06-24 17:45:14.983"
291	cljaankl00gatz4c4qccrqp,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:45:45.666","2023-06-24 17:45:45.666"
292	cljaallo200g4tz4cx7i46s4y,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:46:16.179","2023-06-24 17:46:16.179"
293	cljaam9em00g6tz4c4cwkyfuf3me,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:46:46.943","2023-06-24 17:46:46.943"
294	cljaamx0w00g8tz4cvuxycdc,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:47:17.552","2023-06-24 17:47:17.552"
295	cljaankl00gatz4c4qccrqp,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:47:48.177","2023-06-24 17:47:48.177"
296	cljaa08in00gctz4c157h9eyz,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:48:19.103","2023-06-24 17:48:19.103"
297	cljaavp00gatz4c4c4rdsrfsn,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:48:49.171","2023-06-24 17:48:49.171"
298	cljaapjak00ggtz4c4cph3mx13o,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:49:19.724","2023-06-24 17:49:19.724"
299	cljaa77c00gatz4c4cuzt3kuu,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:49:50.712","2023-06-24 17:49:50.712"
300	cljaaqgn00gkz4c4cslcnnav,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:50:20.855","2023-06-24 17:50:20.855"
301	cljaari7h00gmtz4c4bcfzq469,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:50:51.629","2023-06-24 17:50:51.629"
302	cljaas5xr00gotz4c484vw3r4z,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:51:22.383","2023-06-24 17:51:22.383"
303	cljaastk00gatz4c4u1zxi4,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:51:53.006","2023-06-24 17:51:53.006"
304	cljaath3c00gstz4c4cmnbgm,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:52:23.496","2023-06-24 17:52:23.496"
305	cljaau52700gatz4c4xrscey,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:52:54.559","2023-06-24 17:52:54.559"
306	cljaasq00gwtz4c4bn86xh9k,"31.60","72.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:53:25.240","2023-06-24 17:53:25.240"
307	cljaavf000gatz4c47dwwqi4,"31.60","72.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 17:53:55.285","2023-06-24 17:53:55.285"
571	cljaf0r9z00vmtz4c3c3tsne00,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:08:41.495","2023-06-24 20:08:41.495"
572	cljafpetu00votz4c6xc4zew,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:09:12.019","2023-06-24 20:09:12.019"
573	cljafq27m00vqtz4c4r8mbqwwun,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:09:42.323","2023-06-24 20:09:42.323"
574	cljafqz300vstz4c4zegwrbek,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:10:13.120","2023-06-24 20:10:13.120"
575	cljafrdh00vutz4c4e1nyqabv,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:10:43.593","2023-06-24 20:10:43.593"
576	cljafoswb00vwtz4c3ssyi01n,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:11:13.932","2023-06-24 20:11:13.932"
577	cljafsol00vvtz4c4cvm4jv5zt,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:11:44.648","2023-06-24 20:11:44.648"
578	cljafcah00w0tz4c47jssxng,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:12:15.354","2023-06-24 20:12:15.354"
579	cljafzt900w2tz4c4cloh8eiuu,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:12:45.478","2023-06-24 20:12:45.478"
580	cljafunai00w4tz4c4g7u2fba,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:13:16.266","2023-06-24 20:13:16.266"
581	cljafvavh00w6tz4c4ee6voqab,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:13:46.830","2023-06-24 20:13:46.830"
582	cljafvyp00w8tz4c4coxa58yzh,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:14:17.437","2023-06-24 20:14:17.437"
583	cljafwmi200watz4c4cvmnk6ve0,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:14:48.554","2023-06-24 20:14:48.554"
584	cljafxa8c00wctz4c4cncl650f,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:15:19.308","2023-06-24 20:15:19.308"
585	cljafxzf00wetz4c4cdl9j354,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:15:50.092","2023-06-24 20:15:50.092"
586	cljafyiku00wgtz4c4f26twlm,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:16:20.670","2023-06-24 20:16:20.670"
587	cljafz98r00wvtz4c4ch9dqgzyo,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:16:51.339","2023-06-24 20:16:51.339"
588	cljafxz1700wktz4c4cuknxbqna,"31.10","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:17:22.171","2023-06-24 20:17:22.171"
589	cljag0kkm00wmtz4c4cby213mo2,"31.10","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:17:52.678","2023-06-24 20:17:52.678"
590	cljag183m00w0tz4c4cm3isyupk,"31.10","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:18:23.170","2023-06-24 20:18:23.170"
591	cljag1vsa00wqtz4c4ce9maglds,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:18:53.866","2023-06-24 20:18:53.866"
592	cljag2jy00wstz4c4cmootobj0,"31.10","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:19:24.635","2023-06-24 20:19:24.635"
593	cljag377200wutz4c4cuaye64gb,"31.10","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:19:55.311","2023-06-24 20:19:55.311"
594	cljag3uty00wvtz4c4ca3y7ea0h,"31.20","71.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:20:25.942","2023-06-24 20:20:25.942"
595	cljag4ibe00wvtz4c4cuw5fkazf,"31.10","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:20:56.379","2023-06-24 20:20:56.379"
596	cljag561i00xtz4c4cnvwnjcd,"31.10","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:21:27.126","2023-06-24 20:21:27.126"
597	cljag5tts00x2tz4c4cm6164ay2,"31.20","71.30","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 20:21:57.952","2023-06-24 20:21:57.952"



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L4 – Database Pengujian Durabilitas

802	cljajwbc018gtz4cdytcwpt1,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:06:33.025","2023-06-24 22:06:33.025"
803	cljajwz79018itz4c0u2dksm2,"30.80","70.60","0","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:07:03.477","2023-06-24 22:07:03.477"
804	cljajxmp018ktz4cf0zgbpvi,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:07:33.953","2023-06-24 22:07:33.953"
805	cljajy9xh018mtz4c0e4xwxmh,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:08:04.037","2023-06-24 22:08:04.037"
806	cljajyxrz018otz4cg3udg6uw,"30.70","70.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:08:34.943","2023-06-24 22:08:34.943"
807	cljajziig018qtz4cstzstzih,"30.70","70.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:09:05.705","2023-06-24 22:09:05.705"
808	cljak090d018stz4cubujcivso,"30.70","70.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:09:36.158","2023-06-24 22:09:36.158"
809	cljak0wnj018utz4cpzc36vqj,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:10:06.799","2023-06-24 22:10:06.799"
810	cljak1k6z018wtz4ci1n949z7,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:10:37.307","2023-06-24 22:10:37.307"
811	cljak27yx018yzt4cwqz26tz57,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:11:08.121","2023-06-24 22:11:08.121"
812	cljak5gri0198tz4cqr9j9p9z,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:11:38.298","2023-06-24 22:11:38.298"
813	cljak3irm0192tz4c90iiv2m,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:12:08.770","2023-06-24 22:12:08.770"
814	cljak45yj0194tz4cy15708rj,"30.70","70.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:12:38.828","2023-06-24 22:12:38.828"
815	cljak4t5d0196tz4c8ojvs9hz,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:13:08.881","2023-06-24 22:13:08.881"
816	cljak5gri0198tz4cqr9j9p9z,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:13:39.486","2023-06-24 22:13:39.486"
817	cljak64g5019atz4cb06f50gv,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:14:10.182","2023-06-24 22:14:10.182"
818	cljak6rzh019ctz4cgnwz2vtc,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:14:40.686","2023-06-24 22:14:40.686"
819	cljak7fqk019etz4cxcpxx4te,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:15:11.469","2023-06-24 22:15:11.469"
820	cljak83ez019gtz4cp6ypalcs,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:15:42.155","2023-06-24 22:15:42.155"
821	cljak807019itz4cagc4ex3l,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:16:12.727","2023-06-24 22:16:12.727"
822	cljak9ezk019ktz4cwqbmxyve,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:16:43.808","2023-06-24 22:16:43.808"
823	cljaka2s019etz4cxcpxx4te,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:17:14.668","2023-06-24 22:17:14.668"
824	cljakaqel019otz4c2y5aihmr,"30.70","70.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:17:45.261","2023-06-24 22:17:45.261"
825	cljakbe55019qtz4cted5c2ss,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:18:16.025","2023-06-24 22:18:16.025"
826	cljakc1qy019stz4cu1xr1v2t,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:18:46.618","2023-06-24 22:18:46.618"
827	cljakcpid019etz4cghwkwuwl,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:19:17.413","2023-06-24 22:19:17.413"
828	cljakdb3019wtz4cm7vgca3u,"30.70","70.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-24 22:19:48.256","2023-06-24 22:19:48.256"
1192	cljar0dhk01u4tz4crzogl0g4,"35.80","63.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:25:39.272","2023-06-25 01:25:39.272"
1193	cljar11ak01u6tz4ctol13ffo,"35.80","63.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:26:10.125","2023-06-25 01:26:10.125"
1194	cljar1pdg01u8tz4czwoszm1j,"35.90","63.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:26:41.332","2023-06-25 01:26:41.332"
1195	cljar2cuo01uatz4c4riryxss,"35.90","63.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:27:11.761","2023-06-25 01:27:11.761"
1196	cljar3odd01uettz4cy8nlwjp9,"35.90","63.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:27:42.242","2023-06-25 01:27:42.242"
1197	cljar3nmh01uetz4cf7wvy1wu,"36.00","63.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:28:12.378","2023-06-25 01:28:12.378"
1198	cljar4bhd01ugt4c7v9iqakk,"36.00","63.10","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:28:43.298","2023-06-25 01:28:43.298"
1199	cljar4ysh01uittz4crkp03awn,"36.10","62.80","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:29:13.505","2023-06-25 01:29:13.505"
1200	cljar5mju01uktz4c4llypmnee,"36.10","62.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:29:44.298","2023-06-25 01:29:44.298"
1201	cljar6rv01umtz4ce2r2ptrk,"36.20","62.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:30:14.396","2023-06-25 01:30:14.396"
1202	cljar6wz501uotz4canovua1l,"36.20","62.80","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:30:44.465","2023-06-25 01:30:44.465"
1203	cljar7kvy01uqtz4ctcal47ug,"36.30","62.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:31:15.454","2023-06-25 01:31:15.454"
1204	cljar88k601ustz4cbff6h21m,"36.30","62.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:31:46.134","2023-06-25 01:31:46.134"
1205	cljar8w4301uutz4cnnh57f5l,"36.40","62.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:32:16.659","2023-06-25 01:32:16.659"
1206	cljar9jzd01uwtz4cux4dae3y,"36.40","62.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:32:47.594","2023-06-25 01:32:47.594"
1207	cljara78r01uytz4c7lts9kdg,"36.50","62.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:33:17.738","2023-06-25 01:33:17.738"
1208	cljaraulz01v0tz4cstv9lhw4i,"36.50","62.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:33:48.024","2023-06-25 01:33:48.024"
1209	cljarbi6201v2tz4c4rsvjq9he,"36.60","62.10","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:34:18.555","2023-06-25 01:34:18.555"
1210	cljarc5lv01v4tz4c5saxblv2,"36.60","62.00","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:34:48.931","2023-06-25 01:34:48.931"
1211	cljarctc901v6tz4ck643c4gh,"36.70","61.80","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:35:19.689","2023-06-25 01:35:19.689"
1212	cljardgsv01v8tz4cp0zd2ezm,"36.70","61.90","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:35:50.095","2023-06-25 01:35:50.095"
1213	cljare4ci01vatz4ch46gbccl,"36.70","61.80","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:36:20.610","2023-06-25 01:36:20.610"
1214	cljareru01vctz4ckye07ri4,"36.80","61.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:36:51.056","2023-06-25 01:36:51.056"
1215	cljarffow01vetz4chu3haq9h8,"36.80","61.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:37:21.968","2023-06-25 01:37:21.968"
1216	cljarg2uj01vgtz4cgn7np6an,"36.80","61.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:37:51.980","2023-06-25 01:37:51.980"
1217	cljarg8601vitz4ctx67gwz5,"36.90","61.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:38:22.278","2023-06-25 01:38:22.278"
1218	cljarhe3701vktz4ci6ien8ci,"36.90","61.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-25 01:38:53.203","2023-06-25 01:38:53.203"

Hak Cipta :

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian , penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

L4 – Database Pengujian Durabilitas

1403	cljauw9f025ut4cmbpwsq6,"38.40","57.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:13:26.020","2023-06-25 03:13:26.020"
1404	cljauvmhh025wtz4c0ct8hc46,"38.40","57.80","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:13:56.118","2023-06-25 03:13:56.118"
1405	cljauwad1025ytz4c9ncujyn,"38.50","57.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:14:27.061","2023-06-25 03:14:27.061"
1406	cljauwyc00260tz4c15ago43c,"38.50","57.50","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:14:58.129","2023-06-25 03:14:58.129"
1407	cljauxlht026tz4cki52sw4b,"38.60","57.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:15:28.145","2023-06-25 03:15:28.145"
1408	cljauy9ik026tz4c1mkevq6e,"38.60","57.50","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:15:59.277","2023-06-25 03:15:59.277"
1409	cljauywoc0266tz4cqm4xnlw,"38.70","57.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:16:29.292","2023-06-25 03:16:29.292"
1410	cljauzkoj0268tz4cemjpr6d0,"38.80","57.30","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:17:00.404","2023-06-25 03:17:00.404"
1411	cljav08kc026atz4ctkc41qyv,"38.80","57.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:17:31.356","2023-06-25 03:17:31.356"
1412	cljav0vqu026tz4c4q79uwmk6,"38.80","56.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:18:01.398","2023-06-25 03:18:01.398"
1413	cljav1j4z026tz4c6ojv5m0q,"38.80","57.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:18:31.715","2023-06-25 03:18:31.715"
1414	cljav26wo026tz4c0zbcicx,"38.80","57.00","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:19:02.521","2023-06-25 03:19:02.521"
1415	cljav2uo026tz4c0hkhkxc,"38.80","57.00","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:19:33.327","2023-06-25 03:19:33.327"
1416	cljav3hx026tz4c4cp16va6g,"38.80","57.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:20:03.453","2023-06-25 03:20:03.453"
1417	cljav455z026mtz4cxkwmdk7h,"38.90","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:20:33.576","2023-06-25 03:20:33.576"
1418	cljav4sd8026tz4cfbjo1tnd,"38.90","57.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:21:03.644","2023-06-25 03:21:03.644"
1419	cljav5gag026tz4c0nguz3lf,"38.90","56.80","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:21:34.648","2023-06-25 03:21:34.648"
1420	cljav63m6026tz4cc0t19037,"38.90","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:22:04.878","2023-06-25 03:22:04.878"
1421	cljav6qx1026utz4c0th5712,"38.90","56.50","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:22:35.078","2023-06-25 03:22:35.078"
1422	cljav7e3h026tz4c0ef5fyt,"38.70","55.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:23:05.118","2023-06-25 03:23:05.118"
1423	cljav81wv026ytz4coef5l9g,"37.80","56.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:23:35.983","2023-06-25 03:23:35.983"
1424	cljav8ptl0270tz4cben3j8ng,"38.90","58.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:24:06.970","2023-06-25 03:24:06.970"
1425	cljav9dq3027tz4czhz76rho,"36.50","60.30","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:24:37.947","2023-06-25 03:24:37.947"
1426	cljava110027tz4c0p8gydj0,"36.50","60.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:25:08.149","2023-06-25 03:25:08.149"
1427	cljavaow8027tz4cl8n6icpd,"36.40","60.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:25:39.081","2023-06-25 03:25:39.081"
1428	cljav8bct04027tz4c4cp787f8,"36.20","60.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:26:10.072","2023-06-25 03:26:10.072"
1429	cljavc0ka027atz4cwm9d8t9e,"36.00","61.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-25 03:26:40.859","2023-06-25 03:26:40.859"

Database Durabilitas 24 Jam

1	id,"temp","humid","uv","food","drink","deviceid","createdAt","updatedAt"
2	cljefbb9l0000tzgkfvw8iyeh,"33.20","66.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:09:18.921","2023-06-27 15:09:18.921"
3	cljefbyt0002tzgk8f7gmwxm,"33.20","66.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:09:49.444","2023-06-27 15:09:49.444"
4	cljefbyth0004tzgkjgmnyfk,"33.20","66.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:09:49.445","2023-06-27 15:09:49.445"
5	cljefcm6j0006tzgkj91l06xy,"33.20","66.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:10:19.723","2023-06-27 15:10:19.723"
6	cljefd9xw0008tzgkai90dzgq,"33.20","66.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:10:50.517","2023-06-27 15:10:50.517"
7	cljefdxh0000atzgkknkonzer2,"33.10","66.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:11:21.030","2023-06-27 15:11:21.030"
8	cljefelgy000ctzgz8bbnp1k7,"32.90","67.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:11:52.114","2023-06-27 15:11:52.114"
9	cljef9dt000etzgk34l8wlp,"32.80","67.20","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:12:23.106","2023-06-27 15:12:23.106"
10	cljeffx9u000gtzgzkm2029x1,"32.80","67.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:12:54.067","2023-06-27 15:12:54.067"
11	cljefgl7l0000atzgk58nsq9j,"32.70","67.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:13:25.089","2023-06-27 15:13:25.089"
12	cljefh93l0000atzgkflf8mrn3,"32.50","67.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:13:56.050","2023-06-27 15:13:56.050"
13	cljefhwt0000atzgkmoakdbgni,"32.40","68.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:14:26.788","2023-06-27 15:14:26.788"
14	cljefik3g0000atzgkponcglzr,"32.20","68.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:14:56.956","2023-06-27 15:14:56.956"
15	cljefj7a2000qtzgz2ietycj0,"32.10","69.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:15:27.003","2023-06-27 15:15:27.003"
16	cljefjufo0000atzgk1z6w3p6j,"32.10","69.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:15:57.013","2023-06-27 15:15:57.013"
17	cljefkixh0000atzgkix3cv9k,"32.20","69.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:16:28.197","2023-06-27 15:16:28.197"
18	cljefl5zc0000wtzgzkjsmf01ye,"32.20","69.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:16:58.633","2023-06-27 15:16:58.633"
19	cljefltay0000atzgkyzber0y4,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:17:29.434","2023-06-27 15:17:29.434"
20	cljefmhga00010tzgkfv5vst5o,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:18:00.155","2023-06-27 15:18:00.155"
21	cljefn4oi00012tzgkmmnr710j,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:18:30.258","2023-06-27 15:18:30.258"
22	cljefns5o0014tzgk0abn9yda,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:19:00.684","2023-06-27 15:19:00.684"
23	cljefofj20016tzgkms4sg4yvm,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:19:30.975","2023-06-27 15:19:30.975"
24	cljefp3040018tzgk2c8qerq8,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:20:01.397","2023-06-27 15:20:01.397"
25	cljefpql4001atzgkime0unn9,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:20:31.960","2023-06-27 15:20:31.960"
26	cljefqep001ctzgz87pdzsa9,"32.20","69.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:21:02.509","2023-06-27 15:21:02.509"
27	cljefr1hi001etrezkhhfhekue7,"32.10","69.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 15:21:33.176","2023-06-27 15:21:33.176"

Hak Cipta :

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian , penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

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- b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
- 2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta

337	cljedoen00imt2gkncfo2j3v,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 17:59:06.959","2023-06-27 17:59:06.959"
338	cljelec2000iotzgjrrv9inl,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 17:59:37.609","2023-06-27 17:59:37.609"
339	cljelezq00iotzgzkguds3486,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:00:08.305","2023-06-27 18:00:08.305"
340	cljefnl700istzkg9n6u1zhd,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:00:39.211","2023-06-27 18:00:39.211"
341	cljelgb8h00iutzgkf62jx5r,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:01:09.858","2023-06-27 18:01:09.858"
342	cljelgyo200iwtzgzkh96svfv,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:01:40.227","2023-06-27 18:01:40.227"
343	cljelhmc000iwtzgzkgj9xklt,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:02:10.896","2023-06-27 18:02:10.896"
344	cljelia9e00iwtzgzk8flugg,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:02:41.906","2023-06-27 18:02:41.906"
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347	cljelk9ad00j6tzgkfa4ay9lh,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:04:13.958","2023-06-27 18:04:13.958"
348	cljelkwyh00j8tzgk2azfnlgf,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:04:44.634","2023-06-27 18:04:44.634"
349	cljelku200jatzgkx352aw,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:05:15.579","2023-06-27 18:05:15.579"
350	cljelm82v00jctzgzkiecex4nh,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:05:45.703","2023-06-27 18:05:45.703"
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352	cljeljh8e00jtzgk5ercnqm4,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:06:46.815","2023-06-27 18:06:46.815"
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356	cljelq5t00jotzgzky1e9nu,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:08:49.401","2023-06-27 18:08:49.401"
357	cljelqtby00jqtzgnk61cnee,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:09:19.871","2023-06-27 18:09:19.871"
358	cljelgjr00jstzgzkbs6b6hc,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:09:49.959","2023-06-27 18:09:49.959"
359	cljels4c00jutzgk69468qas,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:10:20.799","2023-06-27 18:10:20.799"
360	cljelsrpu00jutzgkka04phhw,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:10:51.090","2023-06-27 18:10:51.090"
361	cljelft8300jytzgzkfnlcs5wse,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:11:21.556","2023-06-27 18:11:21.556"
362	cljelu2yc00k0tzgkngw47b8k,"30.40","71.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:11:52.308","2023-06-27 18:11:52.308"
363	cljeliuath00k7tzebv17si9n,"30.40","72.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 18:12:23.231","2023-06-27 18:12:23.231"
673	cljerid6p11atzgk9xqbmody5,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:50:43.393","2023-06-27 20:50:43.393"
674	cljerj0z6011ctzgzk6f8qhs,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:51:14.226","2023-06-27 20:51:14.226"
675	cljerjoi011etzgk8mfeakt,"29.90","71.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:51:44.838","2023-06-27 20:51:44.838"
676	cljerkc2r011gtzgzkkm5tku42,"29.90","71.00","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:52:15.267","2023-06-27 20:52:15.267"
677	cljerktz011etzgk3t3myejj,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:52:46.040","2023-06-27 20:52:46.040"
678	cljerlnaa011ktzgzkc9qlum8,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:53:16.451","2023-06-27 20:53:16.451"
679	cljermb03011mtzgzkd933882,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:53:47.187","2023-06-27 20:53:47.187"
680	cljermyd7011otzgzk64c495rh,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:54:17.467","2023-06-27 20:54:17.467"
681	cljernlwf011qtzgzk4fs8ryim,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:54:47.967","2023-06-27 20:54:47.967"
682	cljero9m3011stzgzk5vgvxb5,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:55:18.699","2023-06-27 20:55:18.699"
683	cljerrox2j011utzgk8m50z0zw,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:55:49.099","2023-06-27 20:55:49.099"
684	cljerpkm2011wtzgzk997mc6qy,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:56:19.610","2023-06-27 20:56:19.610"
685	cljerq8i011ytzgzkq4q5uaod,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:56:50.569","2023-06-27 20:56:50.569"
686	cljerqwah0120tzgkq731ra3,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:57:21.401","2023-06-27 20:57:21.401"
687	cljerkr0u0122tzgkq8f0youu,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:57:52.159","2023-06-27 20:57:52.159"
688	cljers7im0124tzgkb1e1ecp5,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:58:22.606","2023-06-27 20:58:22.606"
689	cljersvb30126tzgk05dm17xq,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:58:53.439","2023-06-27 20:58:53.439"
690	cljertivx0128tzgk3kycj1np,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:59:24.033","2023-06-27 20:59:24.033"
691	cljeru6su012atzgzkuz244cx,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 20:59:54.990","2023-06-27 20:59:54.990"
692	cljeruua5012ctzgzky0i4mov,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:00:25.421","2023-06-27 21:00:25.421"
693	cljerhvty012etzgkigfoawrs,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:00:55.942","2023-06-27 21:00:55.942"
694	cljerw5p3012tzgkju80kt69,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:01:26.871","2023-06-27 21:01:26.871"
695	cljerwcl012itzgk93y8nbm,"29.90","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:01:57.526","2023-06-27 21:01:57.526"
696	cljerxgt012ktzgzkdcgrs58,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:02:28.097","2023-06-27 21:02:28.097"
697	cljerj4lt012mtzgzk0l571n26,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:02:58.769","2023-06-27 21:02:58.769"
698	cljerys0x012otzgzkbsz9us4k,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:03:29.122","2023-06-27 21:03:29.122"
699	clierzfmt012atzgk58hfsn,"29.90","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 21:03:59.718","2023-06-27 21:03:59.718"



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

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952	cljewlnv001gstzgakay5rark,"29.30","70.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:13:15.276","2023-06-27 23:13:15.276"
953	cljewmbc701utzgkaxzjwldg,"29.30","70.40","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:13:45.703","2023-06-27 23:13:45.703"
954	cljewmzbe01hwtzggk1697qo2,"29.20","70.50","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:14:16.778","2023-06-27 23:14:16.778"
955	cljewnmx801gytzgk0qkudqxx,"29.30","70.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:14:47.373","2023-06-27 23:14:47.373"
956	cljewis01h0tzgk4svk05v,"29.30","70.60","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:15:17.909","2023-06-27 23:15:17.909"
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958	cljewplns01h4tzgk5c8ads5v,"29.30","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:16:19.048","2023-06-27 23:16:19.048"
959	cljewq9k0m1h6tzgk69kqotjg,"29.30","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:16:50.039","2023-06-27 23:16:50.039"
960	cljewqx8k01h8tzgk36o4h4gd,"29.30","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:17:20.708","2023-06-27 23:17:20.708"
961	cljewrkqi01hatzggkexac7fq,"29.30","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:17:51.163","2023-06-27 23:17:51.163"
962	cljewis8yc01hctzgru1kxj7x,"29.20","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:18:22.549","2023-06-27 23:18:22.549"
963	cljewis8yc01hctzgru1kxj7x,"29.20","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:18:22.549","2023-06-27 23:18:22.549"
964	cljewiswac01hgtzgxmvkucum,"29.20","70.70","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:18:52.789","2023-06-27 23:18:52.789"
965	cljewtk6401hctzggk1ewsnux9,"29.30","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:19:23.741","2023-06-27 23:19:23.741"
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967	cljewuua01hmtzggk16hguzrm,"29.30","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:20:24.371","2023-06-27 23:20:24.371"
968	cljewvii801hotzggk6dwdofa,"29.30","70.80","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:20:54.897","2023-06-27 23:20:54.897"
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970	cljewwteu01hstzggkww0j7xd,"29.20","70.90","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:21:55.687","2023-06-27 23:21:55.687"
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973	cljewysdv01hctzggk18v1nck,"29.20","71.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:23:27.668","2023-06-27 23:23:27.668"
974	cljewzga01i0tzgk0tkjpu4n,"29.20","71.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:23:58.658","2023-06-27 23:23:58.658"
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978	cljex22wr01i8tzgktsi3hvns,"29.20","71.10","0","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-27 23:26:01.260","2023-06-27 23:26:01.260"
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1259	cljf2f67301xutzgk8msysydn,"37.00","57.00","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:56:10.144","2023-06-28 01:56:10.144"
1260	cljf2fti701xwtzggk5sn5w3gl,"37.10","56.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:56:40.351","2023-06-28 01:56:40.351"
1261	cljf2fgh4f01xytzgkqap56dkf,"37.10","56.80","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:57:10.960","2023-06-28 01:57:10.960"
1262	cljf2h4fw01y0tzgkksb8neswv,"37.10","56.90","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:57:41.181","2023-06-28 01:57:41.181"
1263	cljf2hrn201y2tzgkrl2uwyzh,"37.10","56.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:58:11.246","2023-06-28 01:58:11.246"
1264	cljf2ieve01y4tzgku6cqhcy1,"37.10","56.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:58:41.354","2023-06-28 01:58:41.354"
1265	cljf2j2ua01y6tzgkyahy2jdi,"37.20","56.70","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:59:12.418","2023-06-28 01:59:12.418"
1266	cljf2jq2o01y8tzgk2ujij8jisy,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 01:59:42.528","2023-06-28 01:59:42.528"
1267	cljf2kdxl01yatgk52ns2d88,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:00:13.449","2023-06-28 02:00:13.449"
1268	cljf2l1sm01yctzggk3ww658uc,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:00:44.375","2023-06-28 02:00:44.375"
1269	cljf2l1pb801yetzgk1tfedpsf,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:01:14.852","2023-06-28 02:01:14.852"
1270	cljf2mcvww01ygtzggk1m9cwwzr,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:01:45.404","2023-06-28 02:01:45.404"
1271	cljf2n0br01y1tzgkbu34zpz6,"37.20","56.60","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:02:15.783","2023-06-28 02:02:15.783"
1272	cljf2nqh01yktzggkbus2mf8,"37.30","56.50","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:02:46.121","2023-06-28 02:02:46.121"
1273	cljf2obcn01ymtzgkw4zfpvfx,"37.30","56.50","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:03:16.727","2023-06-28 02:03:16.727"
1274	cljf2oqt01y0tzgkcn3kivzf,"37.30","56.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:03:47.151","2023-06-28 02:03:47.151"
1275	cljf2pmxm01yatgkq3obkms2,"37.30","56.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:04:18.395","2023-06-28 02:04:18.395"
1276	cljf2qah701yetzgk19uvfbq,"37.30","56.30","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:04:48.907","2023-06-28 02:04:48.907"
1277	cljf2qy6l01yutzgk6789sk22,"37.30","56.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:05:19.629","2023-06-28 02:05:19.629"
1278	cljf2rlx01ywtzggke90idjia,"37.30","56.40","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:05:49.737","2023-06-28 02:05:49.737"
1279	cljf2s8pl01yytzgk31qbg7i4,"37.30","56.30","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:06:19.929","2023-06-28 02:06:19.929"
1280	cljf2sweb01z0tzgkhij949vz,"37.30","56.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:06:50.627","2023-06-28 02:06:50.627"
1281	cljf2tjvm01z2tzgkthxyw2e,"37.30","56.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:07:21.058","2023-06-28 02:07:21.058"
1282	cljf2u7d0001z4tzgkzsn6wfn1,"37.40","56.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:07:51.492","2023-06-28 02:07:51.492"
1283	cljf2uv1y01z6tzgkcluz309f,"37.40","56.10","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:08:22.198","2023-06-28 02:08:22.198"
1284	cljf2vizr01z7tzgkzr2h4n7,"37.40","56.20","1","0","1","1","clj55n98g0000tzacuglbf7qk","2023-06-28 02:08:53.224","2023-06-28 02:08:53.224"



Hak Cipta milik Jurusan TIK Politeknik Negeri Jakarta

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 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penulisan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Politeknik Negeri Jakarta
2. Dilarang mengumpulkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin dari Jurusan TIK Politeknik Negeri Jakarta

1549	clj7f7oike02dytzgks3pqx8kt,"39.10","52.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:23:24.159","2023-06-28 04:23:24.159"
1550	clj7f7p5r0e2etzgkwo0vyh42,"39.10","52.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:23:54.221","2023-06-28 04:23:54.221"
1551	clj7f7phb02etzgkfpqu3cd,"39.10","52.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:24:24.959","2023-06-28 04:24:24.959"
1552	clj7f7qher02etzgkkm8fd395e,"39.10","52.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:24:55.972","2023-06-28 04:24:55.972"
1553	clj7f7r4or02etzgkpkne06kxc,"39.10","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:25:26.139","2023-06-28 04:25:26.139"
1554	clj7f7rv20e2etzgkn5qulkr,"39.10","52.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:25:56.174","2023-06-28 04:25:56.174"
1555	clj7f7sf20e2eatzgc6z3lo7x,"39.10","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:26:26.486","2023-06-28 04:26:26.486"
1556	clj7f7t39o02etzgkv8x0isuf,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:26:57.612","2023-06-28 04:26:57.612"
1557	clj7f7tr4v02eetzgkbb4sbdw4,"39.10","52.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:27:28.544","2023-06-28 04:27:28.544"
1558	clj7f7ued802egtzgkqadhvvfe,"39.20","52.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:27:58.652","2023-06-28 04:27:58.652"
1559	clj7f7v1f02eitzgk1ea5vrer,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:28:28.755","2023-06-28 04:28:28.755"
1560	clj7f7vpgd02ektzgjke89g21f,"39.20","52.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:28:59.677","2023-06-28 04:28:59.677"
1561	clj7f7wclx02emtzgkqdrfinh,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:29:29.685","2023-06-28 04:29:29.685"
1562	clj7f7x0j102eetzgk4epailri,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:30:00.685","2023-06-28 04:30:00.685"
1563	clj7f7xnu202eetzgkv9fk6vnh,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:30:30.890","2023-06-28 04:30:30.890"
1564	clj7f7ybj902estzggk16ctkucc,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:31:01.605","2023-06-28 04:31:01.605"
1565	clj7f7yppo02eetzgk1ppvx9x,"39.20","52.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:31:31.644","2023-06-28 04:31:31.644"
1566	clj7f7zm0v02ewtzgkgn88ubmy,"39.20","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:32:01.855","2023-06-28 04:32:01.855"
1567	clj7f809ts02eytzgkxmy36kd5,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:32:32.705","2023-06-28 04:32:32.705"
1568	clj7f80x6u02f0tzgkmmklnaqn,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:33:02.982","2023-06-28 04:33:02.982"
1569	clj7f81l6p02f2tzgksxatj04w,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:33:34.081","2023-06-28 04:33:34.081"
1570	clj7f829s02f4tzgk023xdd1x,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:34:05.045","2023-06-28 04:34:05.045"
1571	clj7f82wfp02f6tzgkbo04phdk,"39.30","52.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:34:35.318","2023-06-28 04:34:35.318"
1572	clj7f83k3602f8tzgkewyqq4o,"39.30","52.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:35:05.971","2023-06-28 04:35:05.971"
1573	clj7f84b0j02fatzgk9ufznght,"39.30","52.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:35:36.980","2023-06-28 04:35:36.980"
1574	clj7f84y9e02fctzggkad4au5n5,"39.30","52.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:36:07.106","2023-06-28 04:36:07.106"
1575	clj7f85i5n02fetzeleknovr3,"39.30","52.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 04:36:38.078","2023-06-28 04:36:38.078"
2057	cljfh72kv036etzgkxnczbsc,"40.20","49.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:06:52.880","2023-06-28 09:06:52.880"
2058	cljfh7teq50368tzgkn7s42a61,"40.30","49.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:07:23.742","2023-06-28 09:07:23.742"
2059	cljfh7ue3e036atzgkbb2ow4yuu,"40.20","49.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:07:54.459","2023-06-28 09:07:54.459"
2060	cljfh7v1qq036etzgknnfocwlv,"40.20","49.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:08:25.106","2023-06-28 09:08:25.106"
2061	cljfh7vhp88036etzgkif0a9ato,"40.30","49.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:08:55.545","2023-06-28 09:08:55.545"
2062	cljfh7wqc036etzgk8rogjnsx,"40.30","49.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:09:26.021","2023-06-28 09:09:26.021"
2063	cljfh7x0ej036etzgk4r94hc23,"40.30","49.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:09:56.683","2023-06-28 09:09:56.683"
2064	cljfh7xo29036etzgkfqgm1yv,"40.30","49.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:10:27.346","2023-06-28 09:10:27.346"
2065	cljfh7yc0t036etzgkso9uh320,"40.30","49.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:10:58.398","2023-06-28 09:10:58.398"
2066	cljfh7yz6036etzgk5zdzjpu,"40.30","49.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:11:29.370","2023-06-28 09:11:29.370"
2067	cljfh7zn67036etzgk9bvpj6x5,"40.30","49.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:11:59.504","2023-06-28 09:11:59.504"
2068	cljfi0avv036etzgk1leki01,"40.30","49.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:12:30.235","2023-06-28 09:12:30.235"
2069	cljfi0y3n036etzgk15ppmp5,"40.30","49.10","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:13:00.323","2023-06-28 09:13:00.323"
2070	cljfi1m14036wtzggkaa4k20m,"40.20","48.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:13:31.337","2023-06-28 09:13:31.337"
2071	cljfi29zh036etzgkts2gl3,"40.10","48.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:14:02.381","2023-06-28 09:14:02.381"
2072	cljfi2x5q0370tzgk8ned3b3q,"39.80","48.60","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:14:32.415","2023-06-28 09:14:32.415"
2073	cljfi3kjs0372tzgk0a5qk87v,"39.30","49.50","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:15:02.729","2023-06-28 09:15:02.729"
2074	cljfi48au0374tzgk91eteiv,"38.90","50.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:15:33.510","2023-06-28 09:15:33.510"
2075	cljfi4vnj0376tzgkq76s98i5,"39.00","50.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:16:03.775","2023-06-28 09:16:03.775"
2076	cljfi5jmn0378tzgkdojyo5xg,"39.00","50.30","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:16:34.847","2023-06-28 09:16:34.847"
2077	cljfi67q8037atzgkckpvm7t0,"39.00","50.10","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:17:06.080","2023-06-28 09:17:06.080"
2078	cljfi6vbl037ctzggk9908s7e1,"39.00","50.00","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:17:37.008","2023-06-28 09:17:37.008"
2079	cljfi7jg4037etzgk2142uf3,"38.80","50.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:18:07.925","2023-06-28 09:18:07.925"
2080	cljfi86q0037gtzggkosqib4e3,"38.60","50.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:18:38.088","2023-06-28 09:18:38.088"
2081	cljfi8ugf037itzgkiga0by9r,"38.50","51.20","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:19:08.848","2023-06-28 09:19:08.848"
2082	cljfi9ho3037ktzggkdh9gsk7,"38.30","51.40","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:19:38.932","2023-06-28 09:19:38.932"
2083	clfia4w7037mtezgkxv5ene,"38.20","51.70","1","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 09:20:09.031","2023-06-28 09:20:09.031"



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2468	cljfpah8r03t0tzgk2x7gnhj,"33.80","61.20","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:36:22.347","2023-06-28 12:36:22.347"
2469	cljfpb4ut03tztzgtk59hn0x7,"33.80","61.20","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:36:52.950","2023-06-28 12:36:52.950"
2470	cljfpb3spg03t4tzgkz8nq8r94,"33.80","61.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:37:23.861","2023-06-28 12:37:23.861"
2471	cljfpccg003t6tzgk9411f4fj,"33.80","61.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:37:54.480","2023-06-28 12:37:54.480"
2472	cljfpd3qj03t8tzgkmmxc0vps,"33.70","61.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:38:24.810","2023-06-28 12:38:24.810"
2473	cljfpdrme03tatzgk81xljad0,"33.70","61.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:38:55.766","2023-06-28 12:38:55.766"
2474	cljfpdfj03tctzgtkwdcjp1n4,"33.70","61.70","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:39:26.760","2023-06-28 12:39:26.760"
2475	cljfpf03fth03tetzgk3p1r2uk4,"33.70","61.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:39:57.726","2023-06-28 12:39:57.726"
2476	cljfpf6h03tetzgkz52u3l,"33.60","61.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:40:28.505","2023-06-28 12:40:28.505"
2477	cljfpgekg03titzgkf0z0h06l,"33.60","62.00","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:40:58.807","2023-06-28 12:40:58.807"
2478	cljfpfh27303tktzgtk4shbqhqi,"33.60","62.00","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:41:29.439","2023-06-28 12:41:29.439"
2479	cljfpfhpw03tmtzgtk2qa5dmd,"33.50","62.20","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:42:00.145","2023-06-28 12:42:00.145"
2480	cljfpfdk03tetzgkbb48qp8,"33.50","62.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:42:31.196","2023-06-28 12:42:31.196"
2481	cljfpfj1103tqtzgtkav4h9of,"33.50","62.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:43:01.257","2023-06-28 12:43:01.257"
2482	cljfpfjorv03tztzgtk41tht9v7,"33.50","62.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:43:32.012","2023-06-28 12:43:32.012"
2483	cljfpkvc03tutzgk7niguehx,"33.50","62.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:44:02.791","2023-06-28 12:44:02.791"
2484	cljfplo3103twtzgtkjcrt6nsu,"33.40","62.60","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:44:33.326","2023-06-28 12:44:33.326"
2485	cljfpfnw03tutzgkz3gzmofoq,"33.40","62.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:45:04.209","2023-06-28 12:45:04.209"
2486	cljfpfmc2a03tutzgkzppet05k,"33.40","62.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:45:35.506","2023-06-28 12:45:35.506"
2487	cljfpfmcze03utzgk3sseutdu,"33.40","62.90","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 12:46:05.679","2023-06-28 12:46:05.679"
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2771	cljfiuk7ym049utzgk47imss0d,"32.00","68.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:03:54.958","2023-06-28 15:03:54.958"
2772	cljfiukvod049wtzgtk7aphhues,"31.90","68.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:04:25.694","2023-06-28 15:04:25.694"
2773	cljfiujlm049utzgk7brpnu5y,"31.90","68.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:04:56.699","2023-06-28 15:04:56.699"
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2779	cljfiuphnl04aatzgkbb1q9599,"31.90","68.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:08:00.802","2023-06-28 15:08:00.802"
2780	cljfiufq5e804actzgtkdq0141a0,"31.90","68.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:08:31.569","2023-06-28 15:08:31.569"
2781	cljfiuqt9v04aetzgkz7rppk0r,"31.90","68.40","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:09:02.515","2023-06-28 15:09:02.515"
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2785	cljfiutgxf04amtzgtkyeedlrm,"31.90","68.50","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:11:05.854","2023-06-28 15:11:05.854"
2786	cljfiuu41004aotzgtk7uh60ogj,"31.90","68.80","0","0","1","clj55n98g0000tzacuglbf7qk","2023-06-28 15:11:36.421","2023-06-28 15:11:36.421"
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