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LAMPIRAN

PROGRAM ARDUINO

```
#include "HX711.h"
#define IR_data 2
#define IN3 3
#define IN4 4
#define IN1 5
#define IN2 6
#define trigPin 7
#define echoPin 8
#define HX711_SCK 11
#define HX711_DT 12
#define Buzzer 13
uint32_t bahan;
long duration, distance;
int counter, number, status1;
char dataNextion;
int berat, berat1, berat2, berat3, berat4;
int isi=0;
int kunci=0;
HX711 scale;

void setup () {
  Serial.begin(9600);
  pinMode (IR_data, INPUT);
  pinMode (Buzzer, OUTPUT);
  pinMode (IN1, OUTPUT);
  pinMode (IN2, OUTPUT);
  pinMode (trigPin, OUTPUT);
  pinMode (echoPin, INPUT);
  pinMode (IN3, OUTPUT);
  pinMode (IN4, OUTPUT);
  digitalWrite (IR_data, HIGH);
  scale.begin (HX711_DT, HX711_SCK);
  scale.set_scale (254.02);
  scale.tare ();}
```

```

void loop () {
while (Serial.available()) {
dataNextion = (char) Serial.read();
if (dataNextion == 'A') {
isi=30;
digitalWrite (IN1, HIGH);
digitalWrite (IN2, LOW);
kunci=1;}
else if (dataNextion == 'B') {
isi=0;
digitalWrite (IN1, LOW);
digitalWrite (IN2, LOW);
digitalWrite (IN3, LOW);
digitalWrite (IN4, LOW);
kunci=0;}
else if (dataNextion == 'C') {
isi=50;
digitalWrite (IN1, HIGH);
digitalWrite (IN2, LOW);
kunci=1;}
else if (dataNextion == 'D') {
isi=0;
digitalWrite (IN1, LOW);
digitalWrite (IN2, LOW);
digitalWrite (IN3, LOW);
digitalWrite (IN4, LOW);
kunci=0;}
else if (dataNextion == 'E') {
isi=100;
digitalWrite (IN1, HIGH);
digitalWrite (IN2, LOW);
kunci=1;}
else if (dataNextion == 'F') {
isi=0;
digitalWrite (IN1, LOW);
digitalWrite (IN2, LOW);
digitalWrite (IN3, LOW);
digitalWrite (IN4, LOW);
kunci=0;}
}
}

```

```

else if (dataNextion == 'G') {
  isi=150;
  digitalWrite (IN1, HIGH);
  digitalWrite (IN2, LOW);
  kunci=1;}
else if (dataNextion == 'H') {
  isi=0;
  digitalWrite (IN1, LOW);
  digitalWrite (IN2, LOW);
  digitalWrite (IN3, LOW);
  digitalWrite (IN4, LOW);
  kunci=0;}}

if ((digitalRead (IR_data) == LOW) && (kunci == 1)) {
  digitalWrite (IN1, LOW);
  digitalWrite (IN2, LOW);
  digitalWrite (IN3, HIGH);
  digitalWrite (IN4, LOW);
  kunci=0;}

monitoringBahan ();
penghitungJumlah ();

berat = (int)scale.get_units ();
berat1 = berat-87;
berat2 = berat-108;
berat3 = berat-197;
berat4 = berat-270;

if (isi==30) {
  if (berat1>0) {
    Serial.print("t30.txt=\");
    Serial.print(berat1);
    Serial.print("\");
    Serial.write(0xff);
    Serial.write(0xff);
    Serial.write(0xff);}
  else if (berat1 >= 30) {
    digitalWrite (IN3, LOW);

```

```

digitalWrite (IN4, LOW);
digitalWrite (IN1, HIGH);
digitalWrite (IN2, LOW);}
else {
  Serial.print("t30.txt=\");
  Serial.print(0);
  Serial.print("\");
  Serial.write(0xff);
  Serial.write(0xff);
  Serial.write(0xff);} }

else if (isi==50) {
  if (berat2>0) {
    Serial.print("t50.txt=\");
    Serial.print(berat2);
    Serial.print("\");
    Serial.write(0xff);
    Serial.write(0xff);
    Serial.write(0xff);}
  else if (berat2 >= 50) {
    digitalWrite (IN3, LOW);
    digitalWrite (IN4, LOW);
    digitalWrite (IN1, HIGH);
    digitalWrite (IN2, LOW);}
  else {
    Serial.print("t50.txt=\");
    Serial.print(0);
    Serial.print("\");
    Serial.write(0xff);
    Serial.write(0xff);
    Serial.write(0xff);} }

else if (isi==100) {
  if (berat3>0) {
    Serial.print("t100.txt=\");
    Serial.print(berat3);
    Serial.print("\");
    Serial.write(0xff);
    Serial.write(0xff);

```

```

    Serial.write(0xff);}
else if (berat3 >= 100) {
    digitalWrite (IN3, LOW);
    digitalWrite (IN4, LOW);
    digitalWrite (IN1, HIGH);
    digitalWrite (IN2, LOW);}
else {
    Serial.print("t100.txt=\");
    Serial.print(0);
    Serial.print("\");
    Serial.write(0xff);
    Serial.write(0xff);
    Serial.write(0xff);} }

else if (isi==150) {
    if (berat4>0) {
        Serial.print("t150.txt=\");
        Serial.print(berat4);
        Serial.print("\");
        Serial.write(0xff);
        Serial.write(0xff);
        Serial.write(0xff);}
    else if (berat4 >= 150) {
        digitalWrite (IN3, LOW);
        digitalWrite (IN4, LOW);
        digitalWrite (IN1, HIGH);
        digitalWrite (IN2, LOW);}
    else {
        Serial.print("t150.txt=\");
        Serial.print(0);
        Serial.print("\");
        Serial.write(0xff);
        Serial.write(0xff);
        Serial.write(0xff);} }

void monitoringBahan () {
    digitalWrite (trigPin, LOW);
    delayMicroseconds (2);
    digitalWrite (trigPin, HIGH);

```

```

delayMicroseconds (10);
digitalWrite (trigPin, LOW);
duration = pulseIn (echoPin, HIGH);
distance = duration/58.2;
bahan = (25 - distance) * 4;
Serial.print("j0.val=");
Serial.print(bahan);
Serial.write(0xff);
Serial.write(0xff);
Serial.write(0xff);
Serial.print("t25.txt=\");
Serial.print(bahan);
Serial.print("\");
Serial.write(0xff);
Serial.write(0xff);
Serial.write(0xff);
if (bahan < 10) {
    digitalWrite (Buzzer, HIGH);}
else {
    digitalWrite (Buzzer, LOW);}

void penghitungJumlah () {
counter = digitalRead (IR_data);
if (counter == HIGH) {
    number = number;
    status1 = 0;}
else if (counter == LOW && status1 == 0) {
    number += 1;
    status1 = 1;}
else if (counter == LOW && status1 == 1) {
    number = number;
    status1 = 1;}
Serial.print("t31.txt=\");
Serial.print(number);
Serial.print("\");
Serial.write(0xff);
Serial.write(0xff);
Serial.write(0xff);
Serial.print("t51.txt=\");

```



```
Serial.print(number);  
Serial.print("\");  
Serial.write(0xff);  
Serial.write(0xff);  
Serial.write(0xff);  
Serial.print("t101.txt=\");  
Serial.print(number);  
Serial.print("\");  
Serial.write(0xff);  
Serial.write(0xff);  
Serial.write(0xff);  
Serial.print("t151.txt=\");  
Serial.print(number);  
Serial.print("\");  
Serial.write(0xff);  
Serial.write(0xff);  
Serial.write(0xff);}
```

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Moto : *Today I smile*
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- 2) SMP Negeri 1 Adipala Tahun 2013-2016
- 3) SMA Negeri 1 Maos Tahun 2016-2018
- 4) Politeknik Negeri Cilacap Tahun 2019-2022

Penulis telah melaksanakan Sidang Tugas Akhir pada tanggal 12 Agustus 2022 sebagai salah satu persyaratan untuk memperoleh gelar Ahli Madya (A.Md.).