

## **Koding Program**

```
#include <Servo.h>

#include <SoftwareSerial.h>

#define trigPin 7

#define echoPin 6

Servo myservo;

SoftwareSerial mySerial(9, 10);

char msg;

int L1 = 11;

int L2 = 12;

int L3 = 13;

int sensor = 4;

int state = LOW;

int val = 0;

int pos = 0;

void setup() {

  Serial.begin (9600);

  pinMode(trigPin, OUTPUT);

  pinMode(L1, OUTPUT);

  pinMode(L2, OUTPUT);

  pinMode(L3, OUTPUT);

  pinMode(sensor, INPUT);

  pinMode(echoPin, INPUT);
```

```
mySerial.begin(9600);  
myservo.attach(5);  
}
```

```
void loop() {  
  //Membaca Sensor PIR  
  val = digitalRead(sensor);  
  //Mengukur Jarak  
  long duration, distance;  
  digitalWrite(trigPin, LOW);  
  delayMicroseconds(2);  
  digitalWrite(trigPin, HIGH);  
  delayMicroseconds(10);  
  digitalWrite(trigPin, LOW);  
  duration = pulseIn(echoPin, HIGH);  
  distance = (duration/2) / 29.1;  
  
  if (val == HIGH) {  
    digitalWrite(L1, LOW);  
    digitalWrite(L3, LOW);  
    digitalWrite(L2, HIGH);  
    if (state == LOW) {  
      state = HIGH;  
      //Membuka tutup Kotak sampah  
      for (pos = 50; pos <=180; pos+= 1){
```

```
myservo.write(pos);
delay(15);
}
delay(5000);
}
}
else {
digitalWrite(L1, LOW);
digitalWrite(L2, LOW);
digitalWrite(L3, HIGH);
if (state == HIGH) {
state = LOW;
//Menutup tutup kotak sampah
for (pos = 180; pos >=50; pos -= 1){
myservo.write(pos);
delay(15);
}
Serial.print( distance );
Serial.print(" Cm");
Serial.println();
delay(100);
if (distance <8){
digitalWrite(L1, HIGH);
digitalWrite(L2, LOW);
digitalWrite(L3, LOW);
```

```
    delay(1000);

    myservo.detach();

    Serial.println("mengirim sms");

    mySerial.println("AT+CMGF=1");

    delay(100);

    mySerial.println("AT+CMGS=\"+6281532771947\"\\r"); // Nomor Tujuan

    delay(100);

    mySerial.println("Kotak Sampah loby penuh , Tolong dibersihkan"); // isi
pesan

    mySerial.println((char)26);

    delay(1000);

}

}

}

}
```