LISTING PROGRAM

```
#include <SoftwareSerial.h>
SoftwareSerial SIM900(7, 8);
char inchar = 0;
const byte buz = 12;
const byte out = 13;
const byte ping1 = A5;
const byte ping2 = A4;

byte time = 0;
byte time2 = 0;
byte time3 = 0;
byte looper = 0;
long jar1;
long jar2;

void setup() {
  pinMode(out, OUTPUT);
  digitalWrite(out, HIGH);
  SIM900.begin(19200);
  Serial.begin(19200);
  pinMode(buz, OUTPUT);
  SIM900.println("AT");
  delay(3000);
  digitalWrite(out, LOW);
  digitalWrite(buz, LOW);
}

void loop() {
jar1 = inq1();
jar2 = inq2();
digitalWrite(out, LOW);
digitalWrite(buz, LOW);
```

```
if (jar1 <= 10 && jar2 <= 10) {
  delay(1000);
  jar1 = inq1();
  jar2 = inq2();
  if (jar1 <= 10 && jar2 <= 10) {
    time++;
    if (time == 8){
      digitalWrite(buz, HIGH);
      looper = 5;}
      while (looper == 5){
        jar1 = inq1();
        jar2 = inq2();
        delay(1000);
        if (jar1 <= 10 && jar2 <= 10){
          time2++;
          jar1 = inq1();
          jar2 = inq2();
          if (jar1 <= 10 && jar2 <= 10){
            if (time2 == 3){
              digitalWrite(buz, LOW);
              looper = 6;}
          }
          else {
          digitalWrite(buz, LOW);
          looper = 0;
          time = 0; time2 = 0; time3 = 0;
          }
        }
      }
      while (looper == 6){
        jar1 = inq1();
        jar2 = inq2();
        delay(1000);
          if (jar1 <= 10 && jar2 <= 10){
```

```
            time3++;
            jar1 = inq1();
            jar2 = inq2();
            if (jar1 <= 10 && jar2 <= 10){
              if (time3 == 5){
                sendm();
                recm();}
            }
           }
           else{
           looper = 0;  //Reset variabel looper ke 0 (Flag awal)
            time = 0; time2 = 0; time3 = 0;  //Reset ketiga variabel waktu
           }
       }
   }
   else {digitalWrite(out, LOW); digitalWrite(buz, LOW); time = 0; time2 = 0; time3 =
0;}
  }
}

long inq1()
{
  long dur1, cm1;
  pinMode(ping1, OUTPUT);
  digitalWrite(ping1, LOW);
  delayMicroseconds(2);
  digitalWrite(ping1, HIGH);
  delayMicroseconds(5);
  digitalWrite(ping1, LOW);
  pinMode(ping1, INPUT);
  dur1 = pulseIn(ping1, HIGH);
  cm1 = dur1 / 29 / 2;
  return cm1;
}
```

```
long inq2()
{
  long dur2, cm2;
  pinMode(ping2, OUTPUT);
  digitalWrite(ping2, LOW);
  delayMicroseconds(2);
  digitalWrite(ping2, HIGH);
  delayMicroseconds(5);
  digitalWrite(ping2, LOW);
  pinMode(ping2, INPUT);
  dur2 = pulseIn(ping2, HIGH);
  cm2 = dur2 / 29 / 2;
  return cm2;
}

void sendm(){
SIM900.print("AT+CMGF=1\r");
delay(100);
SIM900.println("AT + CMGS = \"+6281379319086\"");
delay(100);
SIM900.println("Ada orang parkir di depan rumah. Berikan Peringatan? (YA/TIDAK)");
delay(100);
SIM900.println((char)26);
delay(100);
SIM900.println();
delay(100);}

void recm(){
looper = 4;
SIM900.print("AT+CMGF=1\r");
delay(100);
SIM900.print("AT+CNMI=2,2,0,0,0\r");
```

```
while(looper == 4){
  if(SIM900.available() >0){
    inchar=SIM900.read();
    if(inchar=='Y'){
      delay(10);
      inchar=SIM900.read();
      if(inchar=='A'){
        Serial.println("OUT");
        output();
      }
    }
    if(inchar=='T'){
      delay(10);
      inchar=SIM900.read();
      if(inchar=='I'){
        delay(10);
        inchar=SIM900.read();
        if(inchar=='D'){
          delay(10);
          inchar=SIM900.read();
          if(inchar=='A'){
            delay(10);
            inchar=SIM900.read();
            if(inchar=='K'){
              delay(10);
              looper = 0;
              time = 0;
              time2 = 0;
              time3 = 0;
            }
          }
        }
      }
    }
```

```
    }
  }
}

void output(){
looper = 0;
while (looper != 3){
digitalWrite(out, HIGH);
delay(5000);
digitalWrite(out, LOW);
delay(5000);
looper++;}
looper = 0;
time = 0;
time2 = 0;
time3 = 0;}
```