LAMPIRAN

Listing Program :

```
#include <SoftwareSerial.h>


#define buka  0
#define tutup 1


SoftwareSerial mySerial(11, 10);
String number = "085273187461";
//String number = "08990739348";


void setup()
{
  mySerial.begin(9600);   // Setting Sim900 Serial
  Serial.begin(9600);    // Setting the baud rate of Serial Monitor (Arduino)
  pinMode(3,OUTPUT);
  pinMode(4,OUTPUT);
  pinMode(7,OUTPUT);
  delay(100);
  mySerial.println("AT");
  digitalWrite(3,HIGH);
  digitalWrite(4,HIGH);
//  digitalWrite(7,LOW);
  mySerial.println("AT");
  delay(1000);
  RecieveMessage();
```

```
}

void loop()
{
//  Serial.println("a");

  if (Serial.available()>0)
  switch(Serial.read())
  {
    case 'a':
      mySerial.println("AT");
      break;
    case 's':
      SendMessage(buka);
      Serial.println("OK");
      break;
    case 'r':
      RecieveMessage();
      break;
      case 'q':
      digitalWrite(3,HIGH);
        digitalWrite(4,LOW);
        delay(200);
        digitalWrite(3,HIGH);
        digitalWrite(4,HIGH);
      break;
```

```
    case 'w':
    digitalWrite(3,LOW);
      digitalWrite(4,HIGH);
      delay(200);
      digitalWrite(3,HIGH);
      digitalWrite(4,HIGH);
    break;
}

String buffer = readSIM900A();
if (buffer.startsWith("\r\n+CMT: "))
  {
    Serial.println("*** RECEIVED A SMS ***");
    // Remove first 51 characters
    buffer.remove(0, 52);
    int len = buffer.length();
    // Remove \r\n from tail
    buffer.remove(len - 2, 4);

    if (buffer == "Open pintu mobil"){
      SendMessage(buka);
      digitalWrite(3,LOW);
      digitalWrite(4,HIGH);
      delay(200);
      digitalWrite(3,HIGH);
      digitalWrite(4,HIGH);
```

```
//        digitalWrite(7,HIGH);
//        delay(200);
//        digitalWrite(7,LOW);


      }
      else if (buffer == "Lock pintu mobil"){
        SendMessage(tutup);
        digitalWrite(3,HIGH);
        digitalWrite(4,LOW);
        delay(200);
        digitalWrite(3,HIGH);
        digitalWrite(4,HIGH);
//        digitalWrite(7,HIGH);
//        delay(200);
//        digitalWrite(7,LOW);
      }
      else{
        digitalWrite(3,HIGH);
        digitalWrite(4,HIGH);
      }
      Serial.println(len);
      Serial.println(buffer);
      Serial.println("*** END SMS ***");
    }
}
```

```
void SendMessage(int aksi)
{
  mySerial.println("AT+CMGF=1");    //Sets the GSM Module in Text Mode
  delay(500);  // Delay of 1000 milli seconds or 1 second
  mySerial.println("AT+CMGS=\"" +number+ "\"\r"); // Replace x with mobile number
  delay(500);
  if (aksi == 0){
    mySerial.println("Pintu Sudah Terbuka");// The SMS text you want to send
  }
  else{
    mySerial.println("Pintu Sudah Terkunci");// The SMS text you want to send
  }
  delay(100);
  mySerial.println((char)26);// ASCII code of CTRL+Z
  delay(500);
}

void RecieveMessage()
{
  mySerial.println("AT+CNMI=2,2,0,0,0"); // AT Command to receive a live SMS
  delay(1000);
 }

String readSIM900A()
{
    String buffer;
```

```
  while (mySerial.available())
  {
    char c = mySerial.read();
    buffer.concat(c);
    delay(10);
  }
  return buffer;
}
```