LAMPIRAN A

SOURCE CODE SISTEM

```cpp
#include<Servo.h>

#include <LiquidCrystal_I2C.h>

#include <Wire.h>

LiquidCrystal_I2C lcd ( 0x3F, 16, 2 );

#include <SoftwareSerial.h>

#include <String.h>


SoftwareSerial gsmSerial(7, 8);


int pos = 0;

int pir = 10;

int pirState = LOW;


int val_pir = 0;


Servo servo;
void setup() {
 Serial.begin(9600);

  gsmSerial.begin(19200);



 lcd.begin();

 pinMode(2, INPUT);

 pinMode(3, INPUT);

 pinMode(4, INPUT);
```

```
  pinMode(5, INPUT);

  pinMode (11, OUTPUT);

  pinMode (pir, INPUT);

  lcd.setCursor ( 0 , 0 );

  lcd.print("Status  Rumah:");

}

void  loop()

{


  if (digitalRead(2)  == LOW)

  {

  Serial.println ("PINTU  TERBUKA");

    lcd.setCursor ( 0 , 1 );

    lcd.print("terbuka  r.tamu          ");

    digitalWrite (11, HIGH);

    pintudepan();

    delay(3000);

  }

  else

  {

    Serial.println ("TERTUTUP");

    lcd.setCursor ( 0 , 1 );

    digitalWrite (11, LOW);

    lcd.print("tertutup");

  }
```

```
if (digitalRead(3)  == LOW)

{

lcd.setCursor ( 0 , 1 );

  lcd.print("terbuka jd.tamu        ");

   digitalWrite  (11, HIGH);

  jendelaruangtamu();

  delay(3000);

}

else

{

 lcd.setCursor ( 0 , 1 );

  digitalWrite  (11, LOW);

 lcd.print  ("Tertutup           ");

}


 if (digitalRead(4)  == LOW)

{

lcd.setCursor ( 0 , 1 );

  lcd.print("terbuka jd.kamar         ");

   digitalWrite  (11, HIGH);

  jendelakamar();

  delay(3000);

}

else
```

```
{
lcd.setCursor ( 0 , 1 );

 digitalWrite  (11, LOW);

lcd.print ("Tertutup            ");

}


 if (digitalRead(5)  == LOW)

{

lcd.setCursor ( 0 , 1 );

  lcd.print("Terbuka  pin.kamar         ");

  digitalWrite  (11, HIGH);

 pintukamar();

 delay(3000);

}

 else

{

 lcd.setCursor ( 0 , 1 );

 digitalWrite  (11, LOW);

lcd.print ("tertutup            ");

}

val_pir  = digitalRead(pir);

 if (val_pir  == HIGH)

{

 lcd.setCursor ( 0 , 1 );

  digitalWrite  (11, HIGH);
```

```
    lcd.print("GERAKAN  Detec        ");

    pirsms();

    delay(3000);

   }

  else

  {

   lcd.setCursor  ( 0 , 1 );

    digitalWrite  (11, LOW);

  lcd.print  ("tertutup           ");


   }




  delay(500);

 }

void aktif()

{

 gsmSerial.print("AT+CMGF=1\r");    //Because  we want to send the SMS in text
mode

  delay(100);

  gsmSerial.println("AT  + CMGS = \"+6282122303423\"");//send  sms message,
be careful  need to add a country code before the cellphone  number

  delay(100);
```

```
gsmSerial.println("SISTEM AKTIF");//the content of the message

delay(100);

gsmSerial.println((char)26);//the ASCII code of the ctrl+z is 26

delay(100);

}

void pintudepan()

{

  gsmSerial.print("AT+CMGF=1\r");    //Because we want to send the SMS in text
mode

  delay(100);

  gsmSerial.println("AT + CMGS = \"+6282122303423\"");//send sms message,
be careful need to add a country code before the cellphone number

  delay(100);

  gsmSerial.println("Pintu Depan Terbuka");//the content of the message

  delay(100);

  gsmSerial.println((char)26);//the ASCII code of the ctrl+z is 26

  delay(100);

}


void jendelaruangtamu()

{

  gsmSerial.print("AT+CMGF=1\r");    //Because we want to send the SMS in text
mode

  delay(100);

  gsmSerial.println("AT + CMGS = \"+6282122303423\"");//send sms message,
be careful need to add a country code before the cellphone number
```

```
  delay(100);

  gsmSerial.println("JENDELA RUANG TAMU TERBUKA");//the content of
the message

  delay(100);

  gsmSerial.println((char)26);//the ASCII code of the ctrl+z is 26

  delay(100);

}


void pintukamar()

{

  gsmSerial.print("AT+CMGF=1\r");    //Because we want to send the SMS in text
mode

  delay(100);

  gsmSerial.println("AT + CMGS = \"+6282122303423\"");//send sms message,
be careful need to add a country code before the cellphone number

  delay(100);

  gsmSerial.println("Pintu Kamar Terbuka");//the content of the message

  delay(100);

  gsmSerial.println((char)26);//the ASCII code of the ctrl+z is 26

  delay(100);

}

void jendelakamar()

{

  gsmSerial.print("AT+CMGF=1\r");    //Because we want to send the SMS in text
mode

  delay(100);
```

```
gsmSerial.println("AT + CMGS = \"+6282122303423\"");//send sms message,
be careful need to add a country code before the cellphone number

  delay(100);

  gsmSerial.println("Jendela Kamar Terbuka");//the content of the message

  delay(100);

  gsmSerial.println((char)26);//the ASCII code of the ctrl+z is 26

  delay(100);

}


void pirsms()

{

  gsmSerial.print("AT+CMGF=1\r");    //Because we want to send the SMS in text
mode

  delay(100);

  gsmSerial.println("AT + CMGS = \"+6282122303423\"");//send sms message,
be careful need to add a country code before the cellphone number

  delay(100);

  gsmSerial.println("TERJADI GERAKAN DI DAPUR");//the content of the
message

  delay(100);

  gsmSerial.println((char)26);//t009e ASCII code of the ctrl+z is 26

  delay(100);

}
```