Script Arduino Percobaan 1 Ruang Banyak Sensor

****

```
#include <SoftwareSerial.h>
#include <String.h>

SoftwareSerial mySerial(0,1);
float tempC1;
float tempC2;
float tempC3;
float asap;
int pompa1 = 8;
int buzzer = 7;
int pernah1;
int pernah2;
int pernah3;
int pernah4;

void setup()
{
  pinMode(buzzer,OUTPUT);
  pinMode(pompa1,OUTPUT);
  pinMode(6,INPUT);
  digitalWrite(6,HIGH);
```

```
  mySerial.begin(19200);
  Serial.begin(19200);
  delay(500);
}
**********************************************************************
void SendTextMessage1()
{
  mySerial.print("AT+CMGF=1\r");
  delay(100);
  mySerial.println("AT + CMGS = \"+6288802353006\"");
  delay(100);
  mySerial.println("terjadi kebakaran di titik 1,lakukan tindakan lanjut atau hubungi
no telp kebakaran 119");
  delay(100);
  mySerial.println((char)26);
  delay(100);
  mySerial.println();
}



void SendTextMessage2()
{
```

```
  mySerial.print("AT+CMGF=1\r");

  delay(100);

  mySerial.println("AT + CMGS = \"+6288802353006\"");

  delay(100);

  mySerial.println("terjadi kebakaran di titik 2,lakukan tindakan lanjut atau hubungi no telp kebakaran 119");

  delay(100);

  mySerial.println((char)26);

  delay(100);

  mySerial.println();

}

**********************************************************************

void SendTextMessage3()

{

  mySerial.print("AT+CMGF=1\r");

  delay(100);

  mySerial.println("AT + CMGS = \"6288802353006\"");

  delay(100);

  mySerial.println("terjadi kebakaran di titik 3,lakukan tindakan lanjut atau hubungi no telp kebakaran 119");

  delay(100);

  mySerial.println((char)26);

  delay(100);

  mySerial.println();
```

```
 }
**********************************************************************
void SendTextMessage4()
{
  mySerial.print("AT+CMGF=1\r");
  delay(100);
  mySerial.println("AT + CMGS = \"+6288802353006\"");
  delay(100);
  mySerial.println("terjadi kebakaran di titik 4,lakukan tindakan lanjut atau hubungi no telp kebakaran 119");
  delay(100);
  mySerial.println((char)26);
  delay(100);
  mySerial.println();
}
 **********************************************************************
void loop()
{
tempC1 = analogRead(0);
tempC1 = (5*tempC1 * 100.0)/1024.0;
tempC2 = analogRead(1);
tempC2 = (5*tempC2 * 100.0)/1024.0;
tempC3 = analogRead(2);
```

```
tempC3 = (5*tempC3 * 100.0)/1024.0;
tempC4 = analogRead(3);
tempC4 = (5*tempC4 * 100.0)/1024.0;
asap = analogRead(4)

Serial.println();
Serial.print("Temp sensor 1: ");
Serial.print(tempC1);
Serial.println(" Celcius");
Serial.print("Temp sensor 2: ");
Serial.print(tempC2);
Serial.println(" Celcius");
Serial.print("Temp sensor 3: ");
Serial.print(tempC3);
Serial.println(" Celcius");
Serial.print("Temp sensor 4: ");
Serial.print(tempC4);
Serial.println(" Celcius");
Serial.print("CO PPM: ");
Serial.println(asap);
delay(1000);

if (tempC1 > 50 && asap > 300)
```

```
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa1,HIGH);
  SendTextMessage1();
  pernah1=1;
}

if (tempC2 > 50 && asap > 300)
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa1,HIGH);
  SendTextMessage2();
  pernah2=1;
}

 if (tempC3 > 50 && asap > 300)
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa1,HIGH);
  SendTextMessage3();
  pernah3=1;
 }
if (tempC4 > 50 && asap > 300)
```

```
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa1,HIGH);
  SendTextMessage4();
  Pernah4=1;
}
**********************************************************************
if (pernah1==1 && tempC1 < 50 && tempC2 < 50 && tempC3 < 50 && tempC4 < 50)
{
  digitalWrite(pompa1,LOW);
  pernah1=0;
}

if (pernah2==1 && tempC1 < 50 && tempC2 < 50 && tempC3 < 50 && tempC4 < 50)
{
  digitalWrite(pompa1,LOW);
  pernah2=0;
}

if (pernah3==1 && tempC1 < 50 && tempC2 < 50 && tempC3 < 50 && tempC4 < 50)
{
```

```
  digitalWrite(pompa1,LOW);
  pernah3=0;
}
if (pernah4==1 && tempC1 < 50 && tempC2 < 50 && tempC3 < 50 && tempC4 < 50)
{
  digitalWrite(pompa1,LOW);
  pernah4=0;
}

if(digitalRead(6)==0){

  digitalWrite(buzzer,LOW);
}
}
**********
```

Script Arduino Percobaan 3 Ruang

```
**********************************************************************
#include <SoftwareSerial.h>
#include <String.h>

SoftwareSerial mySerial(0,1);
float tempC1;
float tempC2;
float tempC3;
float asap;
int pompa1 = 8;
int pompa2 = 9;
int pompa3 = 10;
int buzzer = 7;
int pernah1;
int pernah2;
int pernah3;
**********************************************************************

void setup()
{
  pinMode(buzzer,OUTPUT);
  pinMode(pompa1,OUTPUT);
```

```
  pinMode(pompa2,OUTPUT);
  pinMode(pompa3,OUTPUT);
  pinMode(6,INPUT);
  digitalWrite(6,HIGH);

  mySerial.begin(19200);
  Serial.begin(19200);
  delay(500);
}
**************************************************************************

void SendTextMessage1()
{
  mySerial.print("AT+CMGF=1\r");
  delay(100);
  mySerial.println("AT + CMGS = \"+6288802353006\"");
  delay(100);
  mySerial.println("terjadi kebakaran di ruang 1,lakukan tindakan lanjut atau hubungi
        no telp kebakaran 119");
  delay(100);
  mySerial.println((char)26);
  delay(100);
  mySerial.println();
```

```
}
void SendTextMessage2()
{
  mySerial.print("AT+CMGF=1\r");
  delay(100);
  mySerial.println("AT + CMGS = \"+6288802353006\"");
  delay(100);
  mySerial.println("terjadi kebakaran di ruang 2,lakukan tindakan lanjut atau hubungi
        no telp kebakaran 119");
  delay(100);
  mySerial.println((char)26);
  delay(100);
  mySerial.println();
}
void SendTextMessage3()
{
  mySerial.print("AT+CMGF=1\r");
  delay(100);
  mySerial.println("AT + CMGS = \"6288802353006\"");
  delay(100);
  mySerial.println("terjadi kebakaran di ruang 3,lakukan tindakan lanjut atau hubungi
        no telp kebakaran 119");
  delay(100);
  mySerial.println((char)26);
```

```
 delay(100);
 mySerial.println();
}
*********************************************************************

void loop()
{
tempC1 = analogRead(0);
tempC1 = (5*tempC1 * 100.0)/1024.0;
tempC2 = analogRead(1);
tempC2 = (5*tempC2 * 100.0)/1024.0;
tempC3 = analogRead(2);
tempC3 = (5*tempC3 * 100.0)/1024.0;
asap = analogRead(3);

Serial.println();
Serial.print("Temp sensor 1: ");
Serial.print(tempC1);
Serial.println(" Celcius");
Serial.print("Temp sensor 2: ");
Serial.print(tempC2);
Serial.println(" Celcius");
Serial.print("Temp sensor 3: ");
```

```
Serial.print(tempC3);
Serial.println(" Celcius");
Serial.print("CO PPM: ");
Serial.println(asap);
delay(1000);

if (tempC1 > 50 && asap > 300)
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa1,HIGH);
  SendTextMessage1();
  pernah1=1;
}

if (tempC2 > 50 && asap > 300)
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa2,HIGH);
  SendTextMessage2();
  pernah2=1;
}

 if (tempC3 > 50 && asap > 300)
```

```
{
  digitalWrite(buzzer,HIGH);
  digitalWrite(pompa3,HIGH);
  SendTextMessage3();
  pernah3=1;
 }

if (pernah1==1 && tempC1 < 50)
{
  digitalWrite(pompa1,LOW);
  pernah1=0;
}

if(pernah2==1 && tempC2 < 50)
{
  digitalWrite(pompa2,LOW);
  pernah2=0;
}

if(pernah3==1 && tempC3 < 50)
{
  digitalWrite(pompa3,LOW);
  pernah3=0;
```

```
}

if(digitalRead(6)==0){

  digitalWrite(buzzer,LOW);
}
}
```

****