PROGRAM:

```
#include <SoftwareSerial.h>
SoftwareSerial gsmSerial(9, 5); //RX, TX
#define trigPin1 A0
#define echoPin1 A1
#define trigPin2 A2
#define echoPin2 A3
#define trigPin3 A4
#define echoPin3 A5

int ALARM = 7;
long duration, distance, FIRSTSensor,SECONDSensor,THIRDSensor;
// Digital pin 8 will be called 'pin8'
int pin8 = 2;
// Analog pin 0 will be called 'sensor'
int sensor = 3;
// Set the initial sensorValue to 0
int sensorValue = 0;

void setup()
{
Serial.begin (9600);
pinMode(trigPin1, OUTPUT);
pinMode(echoPin1, INPUT);
pinMode(trigPin2, OUTPUT);
pinMode(echoPin2, INPUT);
pinMode(trigPin3, OUTPUT);
pinMode(echoPin3, INPUT);
pinMode(ALARM, OUTPUT);
digitalWrite(ALARM, LOW);
}

void loop()
{
SonarSensor(trigPin1, echoPin1);
FIRSTSensor = distance;
SonarSensor(trigPin2, echoPin2);
SECONDSensor = distance;
SonarSensor(trigPin3, echoPin3);
THIRDSensor = distance;
```

```
}

void SonarSensor(int trigPin,int echoPin)
{
digitalWrite(trigPin, LOW);
delayMicroseconds(2);
digitalWrite(trigPin, HIGH);
delayMicroseconds(10);
digitalWrite(trigPin, LOW);
duration = pulseIn(echoPin, HIGH);
distance = (duration/2) / 29.1;
Serial.print("S1:");Serial.println(FIRSTSensor); delayMicroseconds(10);
Serial.print("S2:");Serial.println(SECONDSensor);delayMicroseconds(10);
Serial.print("S3:");Serial.println(THIRDSensor); delayMicroseconds(10);
if(FIRSTSensor<=10 && SECONDSensor<=10 && THIRDSensor<=10)
{
  Serial.print("block at s3\n");
}
else if (FIRSTSensor<=10 && SECONDSensor<=10 && THIRDSensor>=10)
{
  Serial.print("block between s2 and s3\n");
}
else if(FIRSTSensor<=10 && SECONDSensor>=10 && THIRDSensor>=10)
{
  Serial.print("block between s1 and s2\n");
}
else
{
  Serial.print("no block\n");
}

setup1();
}

void setup1()
{
   gsmSerial.begin(9600); // Setting the baud rate of GSM Module
   Serial.begin(9600);    // Setting the baud rate of Serial Monitor (Arduino)
   delay(1000);
   Serial.println("Preparing to send SMS");
   Serial.println("Setting the GSM in text mode");
```

```
  gsmSerial.println("AT+CMGF=1\r");
  delay(20);
  Serial.println("Sending SMS to the desired phone number!");
  gsmSerial.println("AT+CMGS=\"+917871716122\"\r");
  // Replace x with mobile number
  delay(20);
  if(FIRSTSensor<=20 && SECONDSensor<=20 && THIRDSensor<=20)
    {
      gsmSerial.println("block at s3\n");
      gsmSerial.println("area : villapuram");
    }
  else if (FIRSTSensor<=20 && SECONDSensor<=20 && THIRDSensor>=20)
    {
      gsmSerial.println("block between s2 and s3\n");
      gsmSerial.println("area: villapuram");
    }
  else if(FIRSTSensor<=20 && SECONDSensor>=20 && THIRDSensor>=20)
    {
      gsmSerial.println("block between s1 and s2\n");
      gsmSerial.println("area : villapuram");
    }
  else
  {
      gsmSerial.println("no block");
  }  // SMS Text
  delay(20000);
  gsmSerial.println((char)26);            // ASCII code of CTRL+Z
  delay(20);
  setup2();
}

void setup2() {
  // Initialize the digital pin 8 as an output
  pinMode(pin8, OUTPUT);
  // Initialize serial communication at 9600 bits per second
  Serial.begin(9600);
  sensorValue = analogRead(sensor);
  // Print out the value you read
  Serial.println(sensorValue, DEC);
  gsmSerial.println(sensorValue, DEC);
  if(sensorValue>=5)
  {
```

```
    Serial.print("danger\n\n\n\n\n\n");
  }
  else{
    Serial.print("normal\n\n\n\n\n");
  }
  delay(200);

}
```