#include<LiquidCrystal.h>

LiquidCrystal lcd(8, 9, 10, 11, 12, 13);

int BUZZ = A3; //Connect BUZZ To Pin #7 ////////buzzer

int RLED = A0; //Connect LED To Pin #A0 ///////led

int GLED = A1; //Connect LED To Pin #A1 ///////led

int relay = A2; //Connect relay To Pin #6 ///////relay

char data = 0;

void setup()

{

lcd.begin(16, 2);

Serial.begin(9600);

pinMode(BUZZ, OUTPUT);

pinMode(RLED, OUTPUT);

pinMode(GLED, OUTPUT);

pinMode(relay, OUTPUT);

digitalWrite(BUZZ,LOW);

digitalWrite(GLED,LOW);

digitalWrite(relay,LOW);

digitalWrite(RLED,LOW);

lcd.clear();

lcd.setCursor(0,0);lcd.print("Fire Detection");

lcd.setCursor(0,1);lcd.print("and Alerting");

delay(5000);lcd.clear();

lcd.setCursor(0,0);lcd.print("System Using");

lcd.setCursor(0,1);lcd.print("Arduino- GSM");

delay(5000);lcd.clear();

digitalWrite(GLED,LOW);delay(100);

digitalWrite(BUZZ,LOW);delay(100);

digitalWrite(GLED,HIGH);

lcd.setCursor(0,0);

lcd.print(" NO FIRE ");

lcd.setCursor(0,1);

lcd.print(" ALAERT ");

digitalWrite(BUZZ,LOW);delay(100);

digitalWrite(RLED,LOW);delay(100);

digitalWrite(GLED,HIGH);delay(100);

digitalWrite(relay,LOW);delay(100);

}

/////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

void loop()

{

st:

if (Serial.available() > 0)

{

data = Serial.read();

///////////////////////////////////

if(data == 'S')

{

lcd.setCursor(0,0);

lcd.print(" NO FIRE ");

lcd.setCursor(0,1);

lcd.print(" ALAERT ");

digitalWrite(BUZZ,LOW);delay(100);

digitalWrite(RLED,LOW);delay(100);

digitalWrite(GLED,HIGH);delay(100);

digitalWrite(relay,LOW);delay(100);

}

if(data == 'F')

{

lcd.setCursor(0,0);

lcd.print(" Fire ");

lcd.setCursor(0,1);

lcd.print(" Detected ");

digitalWrite(BUZZ,HIGH);delay(100);

digitalWrite(RLED,HIGH);delay(100);

digitalWrite(GLED,LOW);delay(100);

digitalWrite(relay,HIGH);delay(100);

lcd.clear();lcd.print("Sending SMS ");

delay(500);

Send();

delay(500);

digitalWrite(BUZZ,LOW);digitalWrite(RLED,LOW);

digitalWrite(relay,LOW);delay(100);

lcd.clear();lcd.print("CALLING------1 ");

Serial.print("ATD+91");

Serial.print("7095906007");

Serial.print(";\r\n");delay(12000);

Serial.println("ATH");

delay(2000);

lcd.setCursor(0,0);

lcd.print(" NO FIRE ");

lcd.setCursor(0,1);

lcd.print(" ALAERT ");

digitalWrite(BUZZ,LOW);delay(100);

digitalWrite(RLED,LOW);delay(100);

digitalWrite(GLED,HIGH);delay(100);

digitalWrite(relay,LOW);delay(100);

goto st;

}

}

}

void init\_sms1()

{Serial.println("AT+CMGF=1");delay(400);Serial.println("AT+CMGS=\"7095906007\""); delay(400);}

void Send\_sms()

{

Serial.println("Fire Detected");delay(500);

Serial.println("Plz Rescue ");delay(500);

Serial.println("https://www.google.com/maps/place/17.3572096,78.5580032");delay(500);

Serial.write(26);delay(3000);lcd.clear();

lcd.print("Message Sent ");

delay(1000); lcd.clear();

Serial.print("AT\r\n");delay(500);

Serial.print("AT\r\n");delay(500);

Serial.println("AT+CMGF=1");delay(200);

lcd.clear();

}

void Send()

{

init\_sms1();delay(1000);lcd.clear();lcd.print("Sending SMS ");Send\_sms();

}