

SMART HOME (SAFETY SYSTEM AND FIRE SENSOR)

SOURCE CODE:

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>

// Set the LCD address to 0x27 for a 16 chars and 2 line display
LiquidCrystal_I2C lcd(0x27, 16, 2);

int flameSensorPin = 0; // input pin for flame sensor
int fR; // reading of the flame sensor
int buzzerPin=8; // pin assigned to buzzer
int tt=1023;
void setup(void)
{
  Serial.begin(9600); // starting the serial monitor
  pinMode(buzzerPin,OUTPUT); // output for the buzzer
  pinMode(7, OUTPUT); // output for the DC relay
}
void loop(void)
{
  fR = analogRead(flameSensorPin); // reads the flamesensor pin
```

```
if(fR<1023) //if loop for flame detected
{

    digitalWrite(7, HIGH); //DC relay turned on
    digitalWrite(buzzerPin,HIGH); //buzzer turned on
    delay(1000);
    digitalWrite(7, LOW); //DC relay turned on

    // initialize the LCD
    lcd.begin();

    // Turn on the backlight and print a message.
    lcd.backlight();
    lcd.print("LCD is Working");

}

else // incase no fire detected
{
    digitalWrite(buzzerPin,LOW);
    digitalWrite(7, LOW);
    delay(1000);
}

Serial.print("Analog reading = ");
Serial.println(fR); // the raw analog reading delay(1000);
delay(500);
}
```

OUTPUT:

