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 blacklight 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: