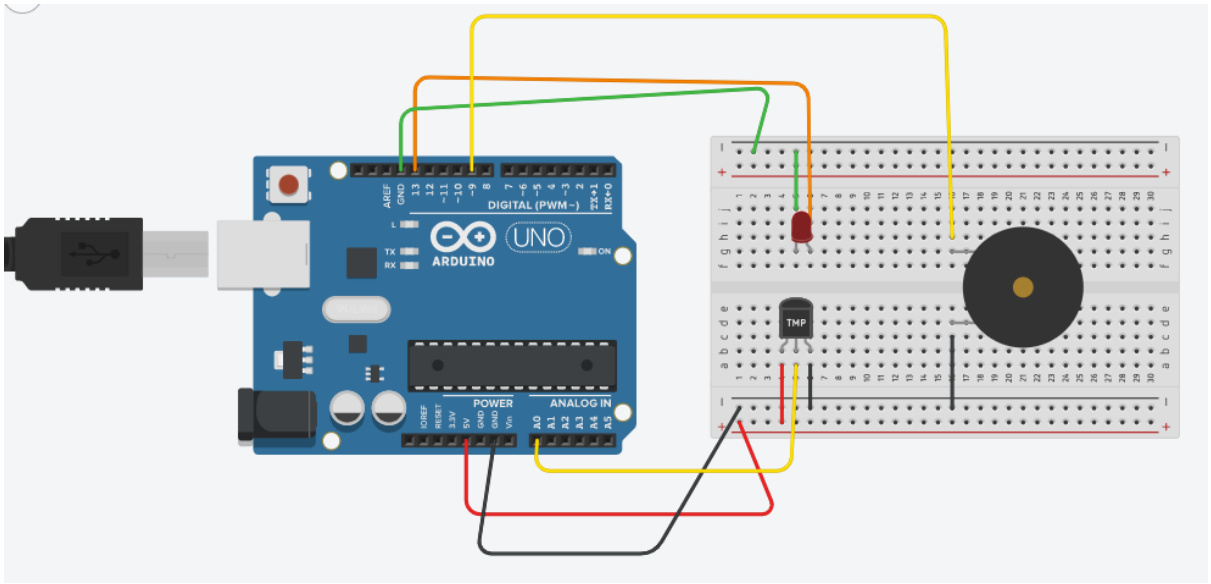
Flame Sensor

Harsha R

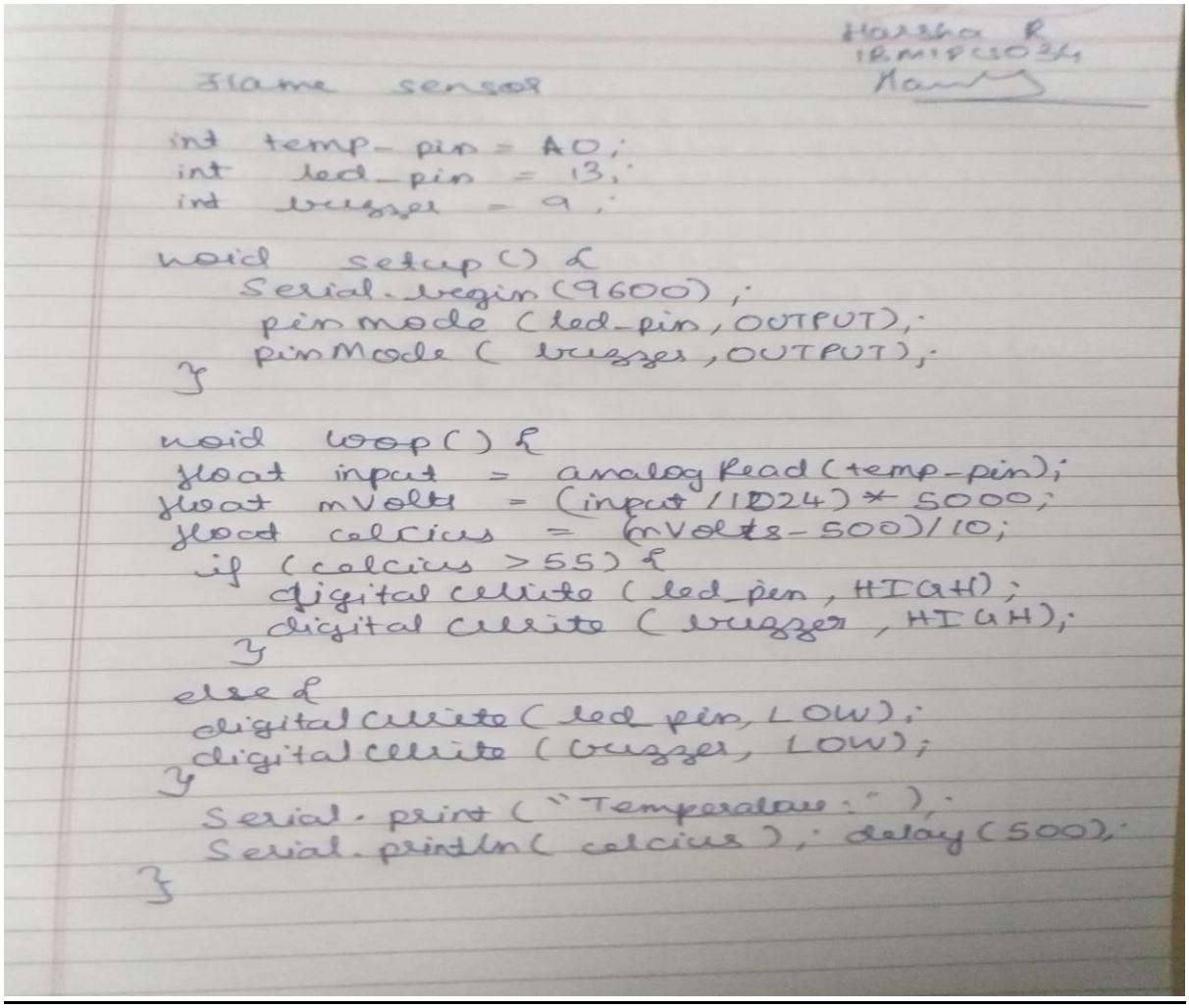
1BM18CS034

Aim : To detect and alert an instance of a fire.

Circuit Diagram



Handwritten Code

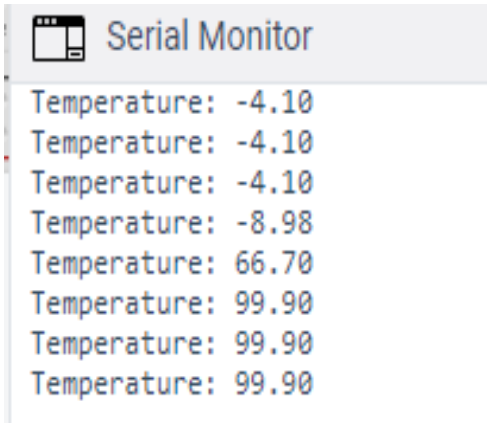


Code

```
int temp_pin = A0;

int led_pin = 13;

int buzzer = 9;

void setup()

{

  Serial.begin(9600);
```

```
  pinMode(led_pin,OUTPUT);
          pinMode(buzzer,OUTPUT);
}

void loop()
{

  float input = analogRead(temp_pin);
 float mVolts = (input/1024.0)*5000;
  float celcius = (mVolts-500)/10;
  if(celcius>45){
  digitalWrite(led_pin,HIGH);
    digitalWrite(buzzer,HIGH);
  }
  else {
  digitalWrite(led_pin,LOW);
    digitalWrite(buzzer,LOW);
  }
  Serial.print("Temperature: ");
  Serial.println(celcius);
  delay(500);
}
```

Observation

In case of a fire, the led starts glowing and the buzzer starts ringing to alert about it.

Output