

IOT LAB - 5th Sem

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Program Title : Fire Detection

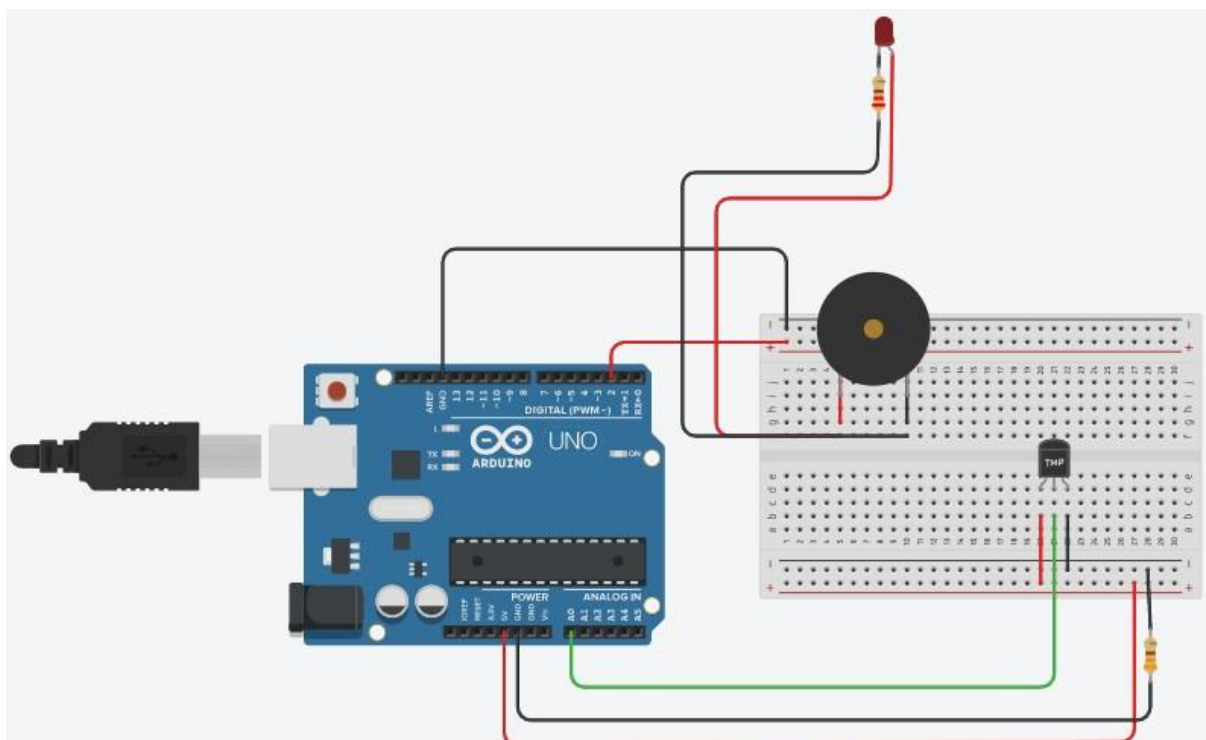
Aim :

To turn on a LED and buzzer upon detecting a fire (aka high temp) using an Arduino Uno board.

Hardware Required :

- Arduino Uno Board
- LED
- Buzzer
- Temperature Sensor
- 330 Ohm Resistor
- 220 Ohm Resistor

Circuit Diagram :



Written Code :

8) Temperature Sensor

```
int tmpSensor = A0;  
int outputPin = 0;  
float tmp;  
void Setup()  
{  
  Serial.begin(9600);  
}  
void loop()  
{  
  int rawVoltage = analogRead(outputPin);  
  float millivolts = (rawVoltage / 1024.0) * 500;  
  float celsius = millivolts / 10;  
  Serial.print(celsius);  
  Serial.print("Degrees in Celsius,");  
  Serial.print((celsius * 9) / 5 + 32);  
  Serial.println("Degrees Fahrenheit");  
  delay(1000);  
}
```

Observation /Output :

The LED and Buzzer are turned on when a fire is detected.