## **IBM ASSIGNMENT- I**

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PNT2022TMID38188

NAME :

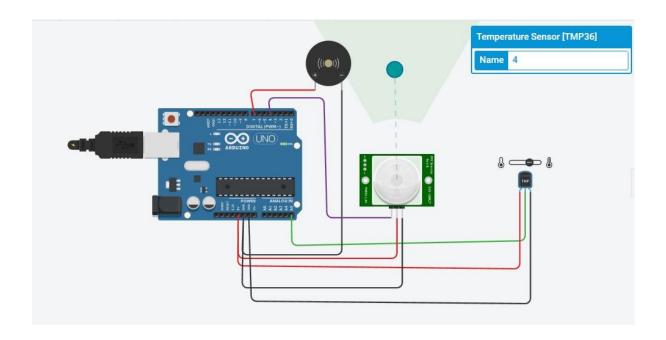
**KEERTHIMATHI M** 

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Create a circuit with Piezo alarm, PIR Sensor, TMP Sensor with below functionalities:

- 1.Alarm should sound in one manner if temp is above 60C
- 2. Alarm should sound with another frequency if motion is detected in PIR Sensor.

#### **CIRCUIT LAYOUT:**



## CODE:

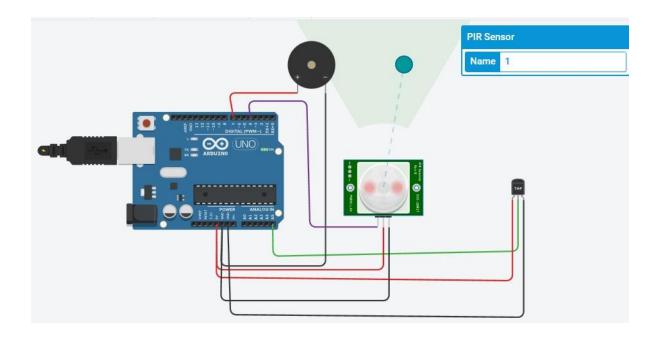
```
// C++ code
//
void setup()
{
    Serial.begin (9600);
    pinMode(4, INPUT);
    pinMode(7,OUTPUT);
    pinMode(A5,INPUT);
}

void loop()
{
    int motion = digitalRead(4);
    if (motion==1){
    Serial.println("Motion detected");
        tone (7,200);
        delay(350);
```

```
}
 else{
Serial.println("No Motion");
noTone(7);
 }
{
 double data=analogRead(A5);
 double n=data/1024;
 double volt=n*5;
 double off=volt-0.5;
 double temperature=off*100;
 if (temperature>59.99){
Serial.print("Temperature data:");
Serial.println(temperature);
 tone(7,1000);
 delay(350);
 }
 else
Serial.print("Temperature data: ");
Serial.println(temperature);
noTone(7);
}
}
```

### **OUTPUT:**

**PASSIVE INFRARED SENSOR:** 



# TEMPERTURE SENSOR (AT 60°C):

