

IBM ASSIGNMENT- I

TEAM ID : PNT2022TMID26645

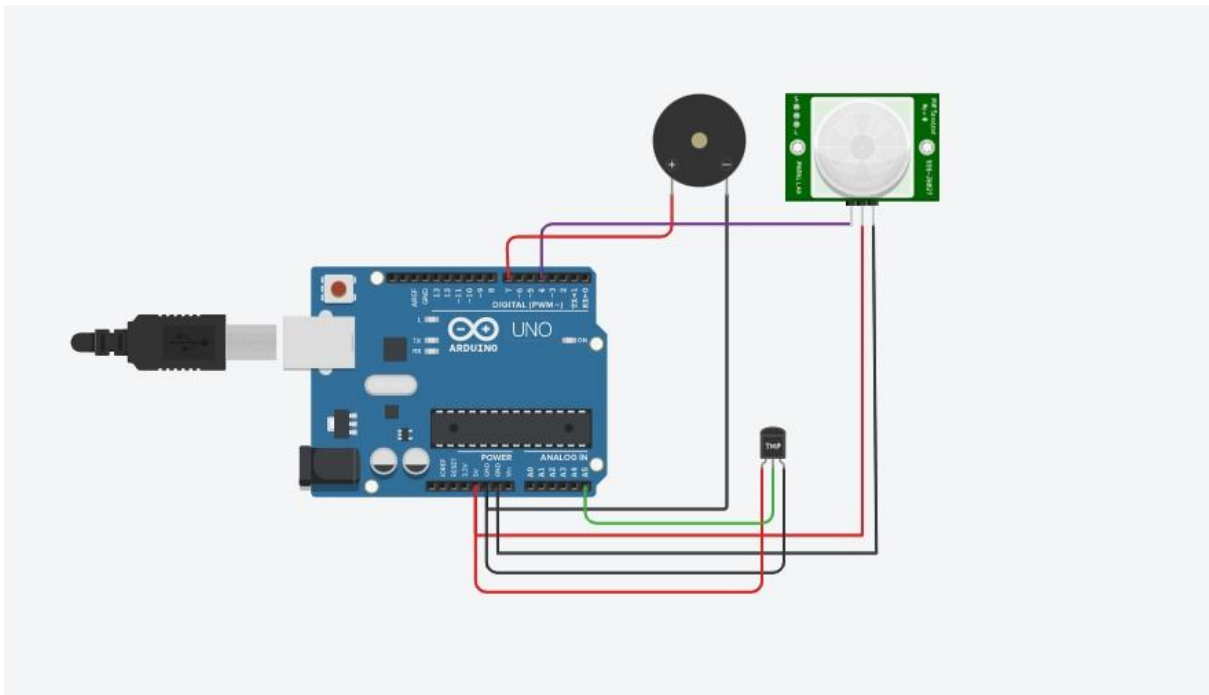
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Create a circuit with Piezo alarm, PIR Sensor, TMP Sensor with below functionalities:

- 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);
}

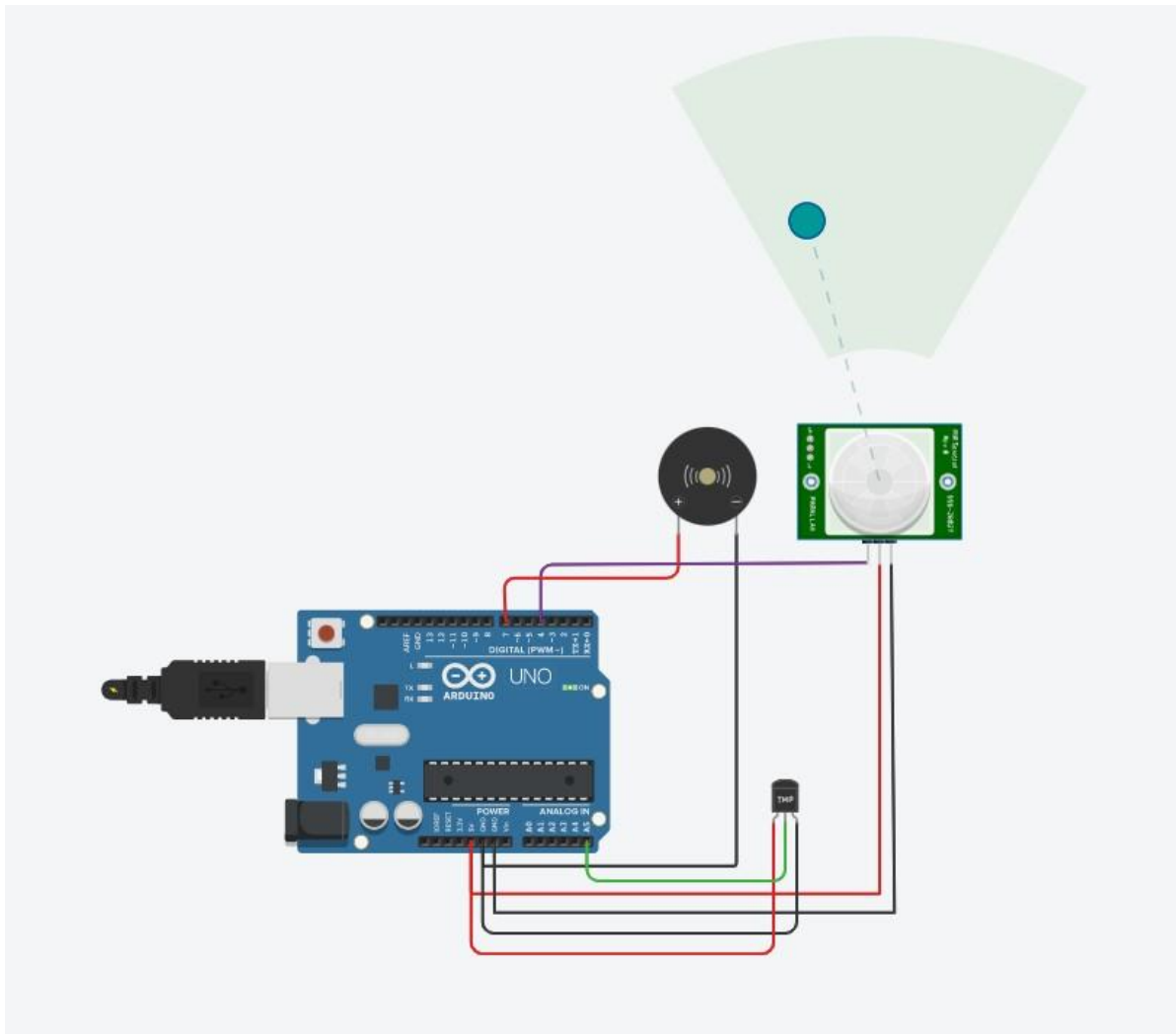
void loop()
{
    int motion = digitalRead(4);
    if (motion==1){
        Serial.println("Motion detected");
        tone (7,200);
        delay(350);
    }
    else{
        Serial.println("No Motion");
        noTone(7);
    }
}

{
    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):

