IBM ASSIGNMENT-I

TEAM ID: PNT2022TMID26645

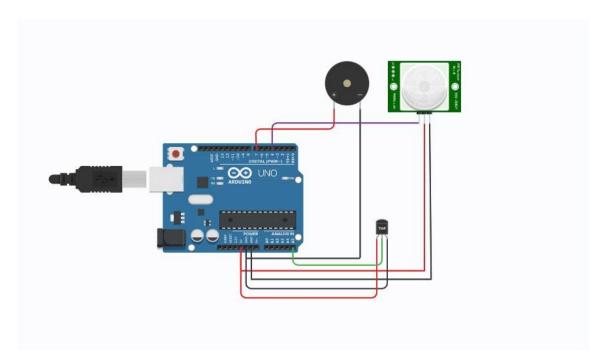
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Create a circuit with Piezo alarm, PIR Sensor, TMP Sensor with below functionalities:

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

CIRCUIT LAYOUT:



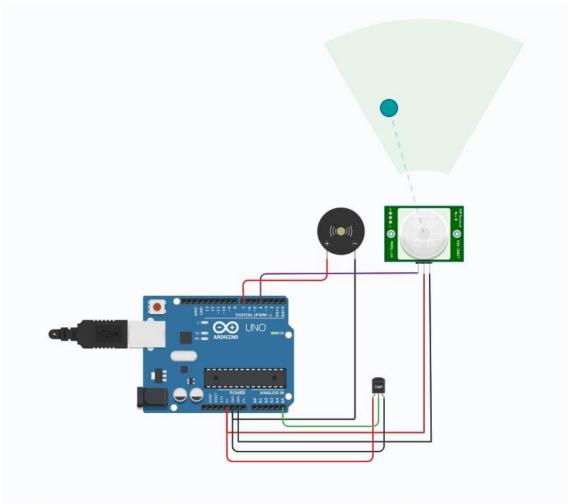
CODE:

```
// 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):

