

IBM ASSIGNMENT- I

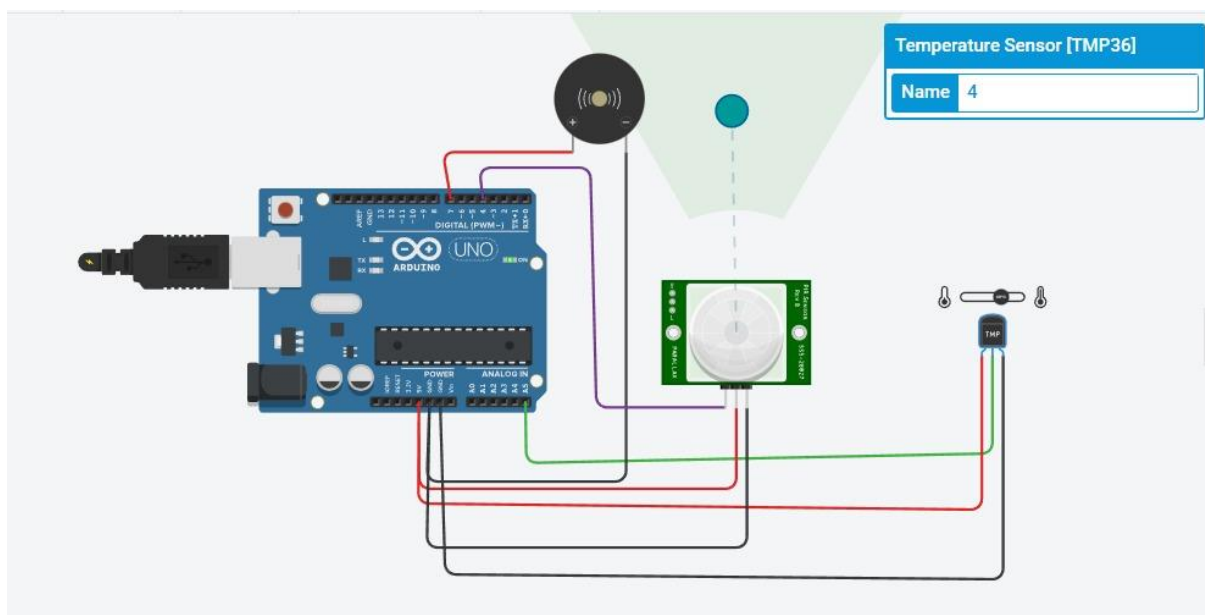
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Create a circuit with Piezo alarm, PIR Sensor, TMP Sensor with below functionalities:

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);Anna ❤️ ✨
}

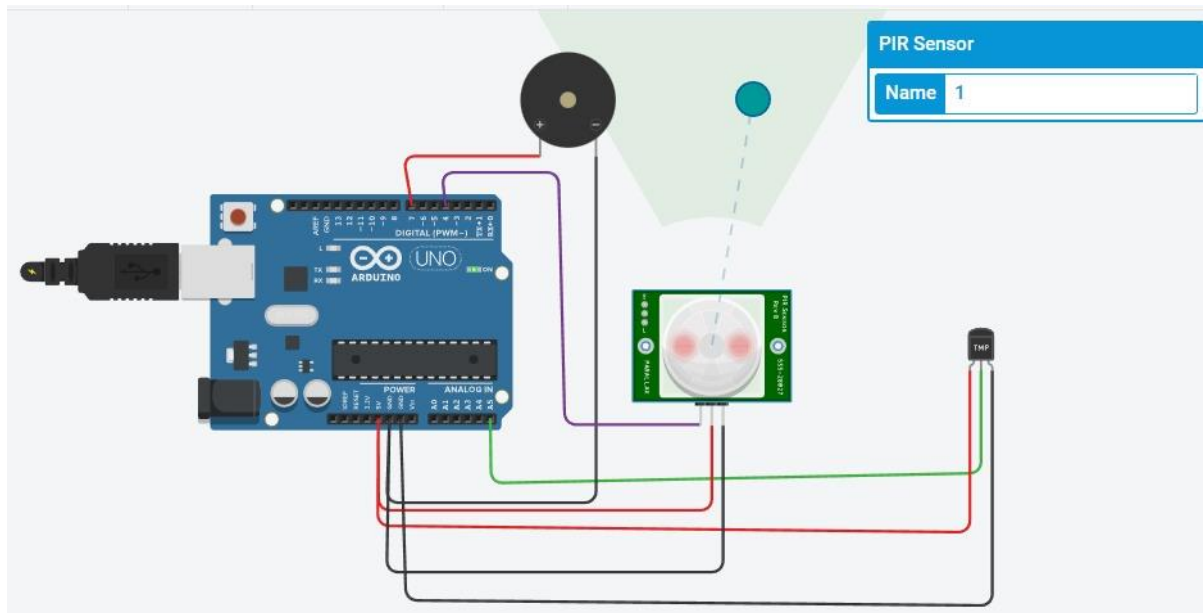
void loop()
{
  int motion = digitalRead(4);
  if (motion==1){
    Serial.println("Motion detected");
    tone (7,200);
    delay(350);
  }
  else{
    Serial.println("No Motion");
    noTone(7);
  }
  {
    double data=analogRead(A5);
    double n=data/1024;
    double volt=n*5;
    double off=volt-0.5;
    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):

