

ASWIN R

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Assignment question::

Using PIR sensor and tmp36(Temperature sensor), piezo alarm, please create a circuit with Arduino Uno with below functionalities.

1. Alarm should give one sound when there is a motion near PIR sensor
2. Alarm should sound with different sound when the temperature is above 60 degrees.

Arduino code :

```
float temp;

int Buzz=A2;

int sensor=12;

int transistor=2;

void setup()
{
    Serial.begin(9600);

    pinMode(2,INPUT);

    pinMode(12,OUTPUT);

    Serial.println("waiting for motion");

}

void loop()
{

    double data=analogRead(A2);

    double n=data/1024;


    double vout=n*5;


    double off=vout-0.5;
```

```

double temperature=off*100;

Serial.print("Temperature data: ");

Serial.println(temperature);


if(temp>60)
{
    digitalWrite(Buzz,HIGH);
    Serial.println("temperature detected");
    tone(12,100);
    delay(1000);
    tone(12,200);
    delay(1000);
}

int val = digitalRead(2);
if(val ==HIGH)
{
    digitalWrite(transistor, HIGH);
    Serial.println("Motion Detected");
    tone(12,100); //pin number, frequency, delay(optional)
    delay(1000);
    tone(12,200);
    delay(1000);
}

if(temp <= 60)
{
    digitalWrite(Buzz,LOW);
    Serial.println("No temperature detected");
    noTone(12);
    delay(500);
}

if(val == LOW)

```

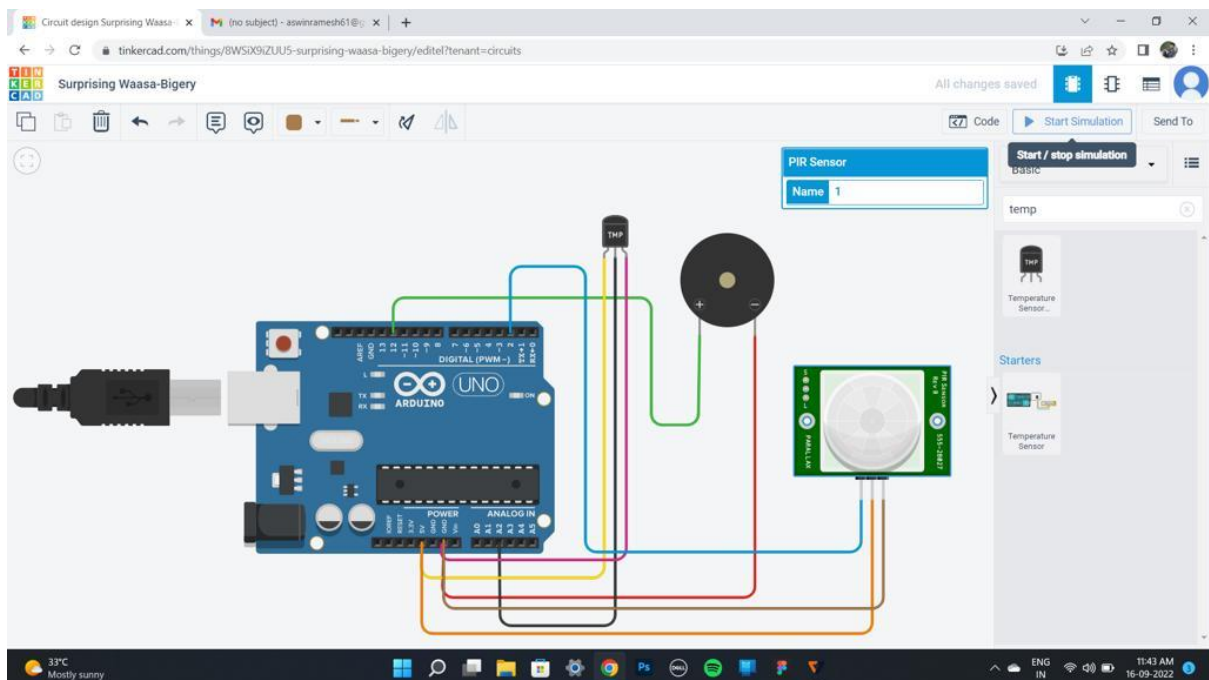
```

{
  digitalWrite(transistor, LOW);
  Serial.println("NO Motion");
  noTone(12);
  delay(500);
}
delay(1000);
}

```

SCREENSHOT :

Screenshot 1::



Screenshot 2 ::

