

# Sneha.S

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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)
```

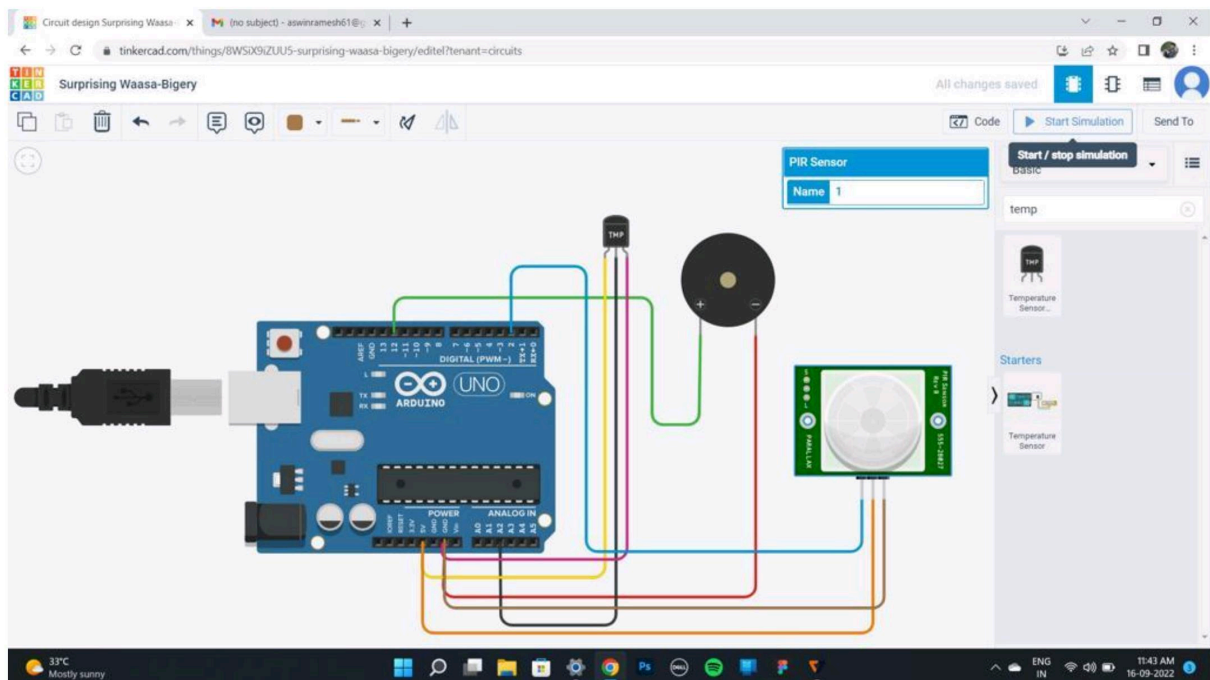
```

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

```

SCREENSHOT :

Screenshot 1::



Screenshot 2 ::

