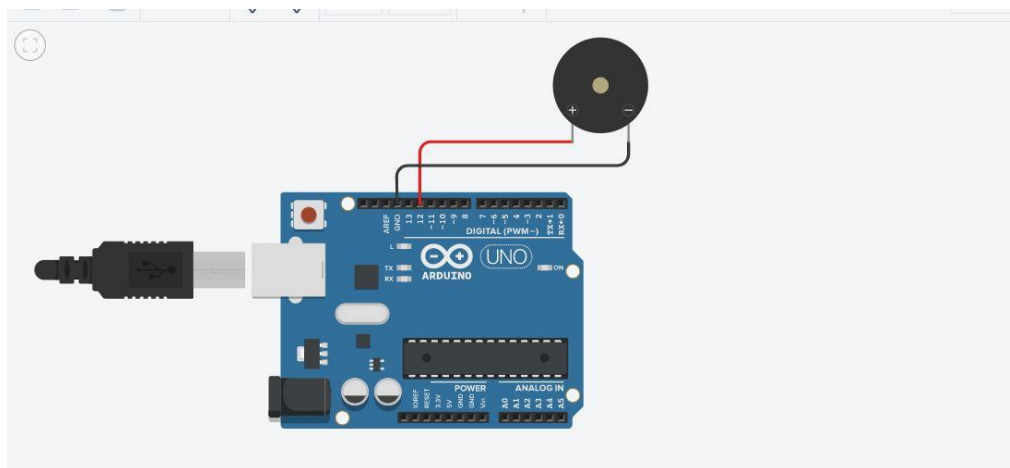
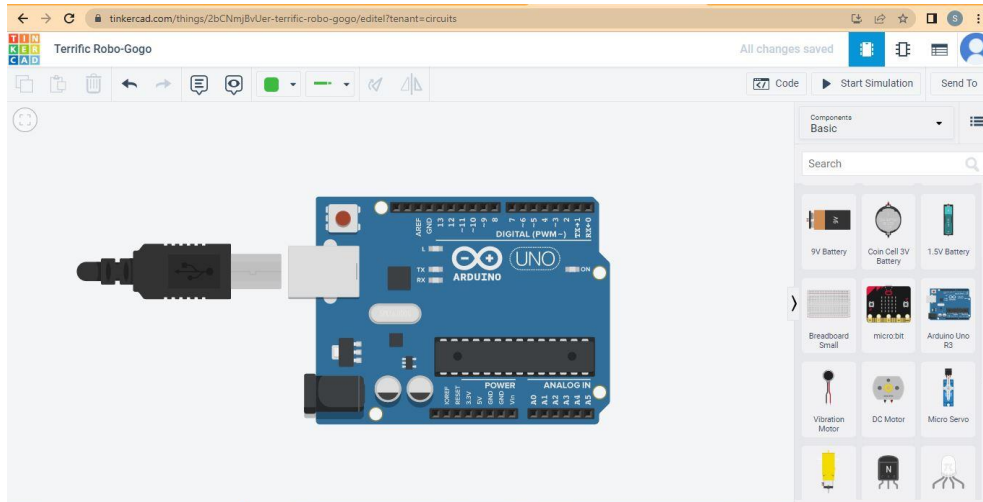
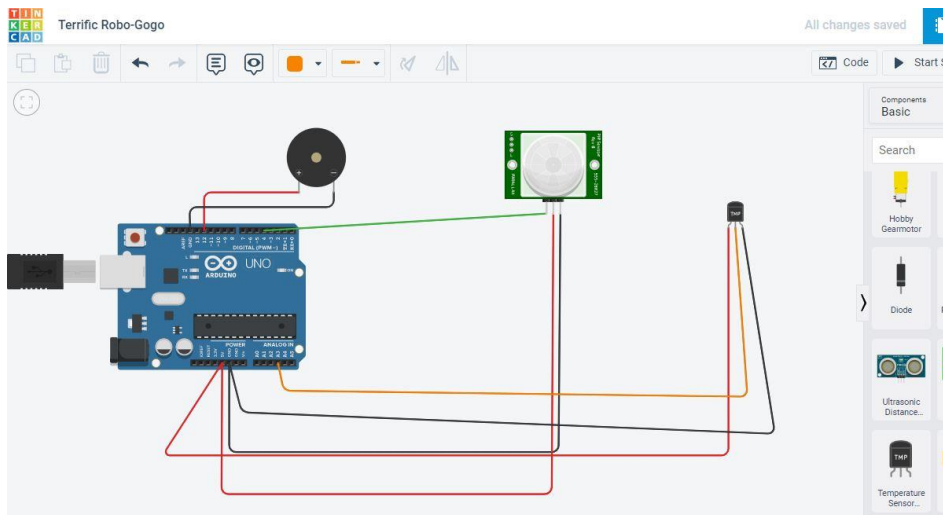
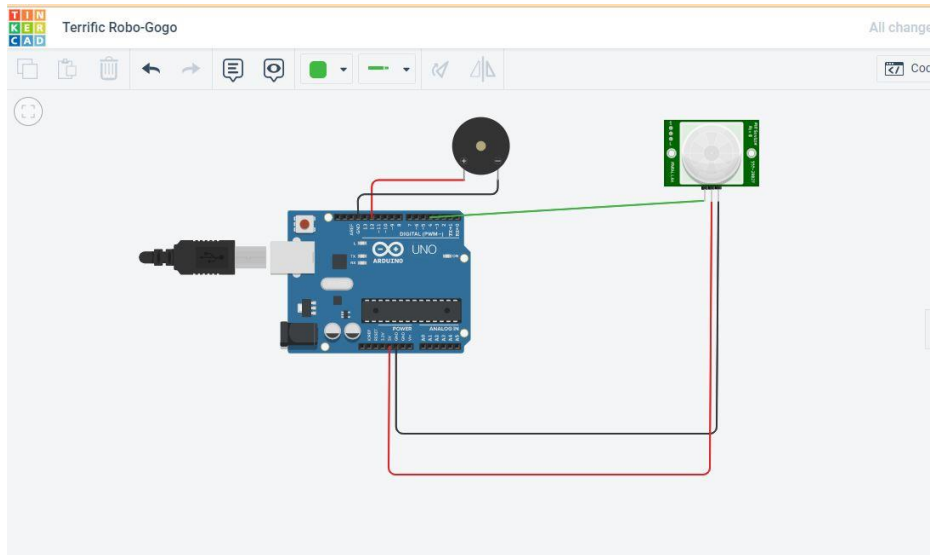


## Assignment -1

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.
- Included following sensor: Arduino, PIR sensor, TMP sensor, piezo alarm.





## CODE:

```
float temp;
```

```
void setup()
```

```
{
```

```
pinMode(4,INPUT);
```

```
pinMode(12,OUTPUT);
```

```
Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{
```

```
  if(digitalRead(4)==HIGH)
```

```
  {
```

```
    tone(12,523,1000);
```

```
  } else {
```

```
    noTone(12);
```

```
  }
```

```
  temp=analogRead(A3);
```

```
  Serial.println("temp:");
```

```
  Serial.println(temp);
```

```
  temp=temp*0.48828125;
```

```
  Serial.println(temp);
```

```
  if(temp>=110.84){
```

```
    tone(12,100,2000);
```

```
    Serial.println("Above 60 c temperture");
```

```
  }
```

```
  else{
```

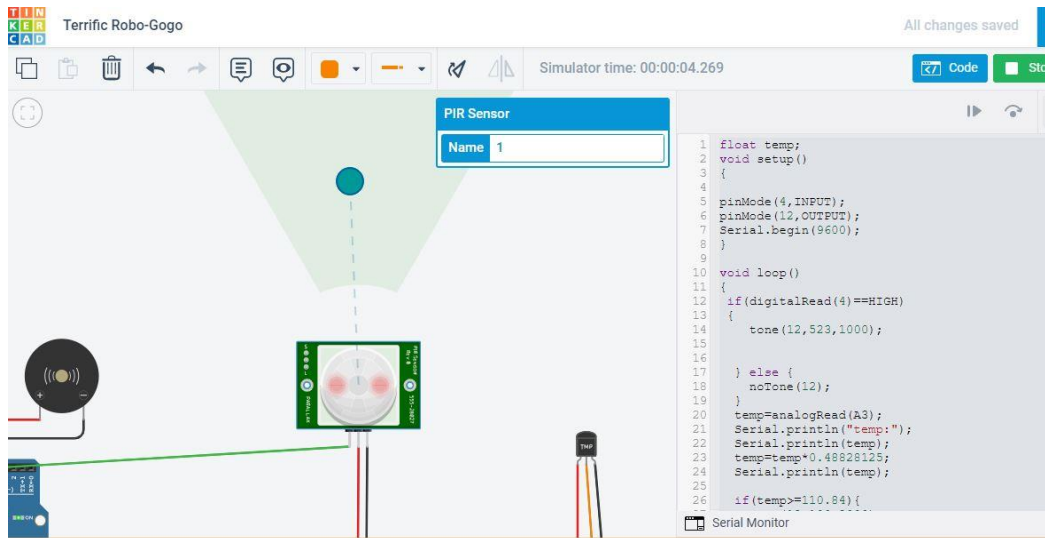
```
    noTone(12);
```

```
  }
```

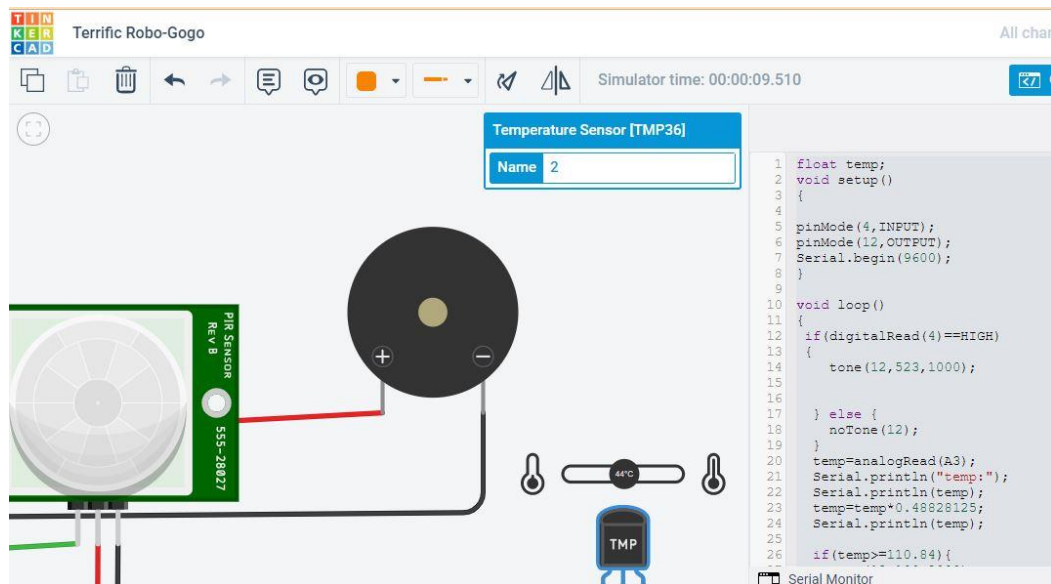
```
}
```

## Output:

### PIR Sensor alarm



### Low Temperature:



## High Temperature:

The screenshot displays an Arduino IDE simulation environment. On the left, a breadboard circuit is shown with a green PIR sensor (labeled 'PIR Sensor Rev B 555-2827') connected to a black circular buzzer. A red wire connects the sensor to the buzzer's positive terminal. A black wire connects the buzzer's negative terminal to a blue temperature sensor module (labeled 'TMP'). The temperature sensor module is also connected to a potentiometer (labeled '52°C') and a small blue buzzer. A tooltip for the temperature sensor shows 'Temperature Sensor [TMP36]' and 'Name 2'.

The right side of the IDE shows the following code:

```
1 float temp;
2 void setup()
3 {
4
5 pinMode(4, INPUT);
6 pinMode(12, OUTPUT);
7 Serial.begin(9600);
8 }
9
10 void loop()
11 {
12   if(digitalRead(4)==HIGH)
13   {
14     tone(12, 523, 1000);
15
16
17   } else {
18     noTone(12);
19
20 temp=analogRead(A3);
21 Serial.println("temp:");
22 Serial.println(temp);
23 temp=temp*0.48828125;
24 Serial.println(temp);
25
26   if(temp>=110.84){
27     tone(12, 523, 1000);
28   }
29 }
```

The bottom right corner shows the 'Serial Monitor' tab.