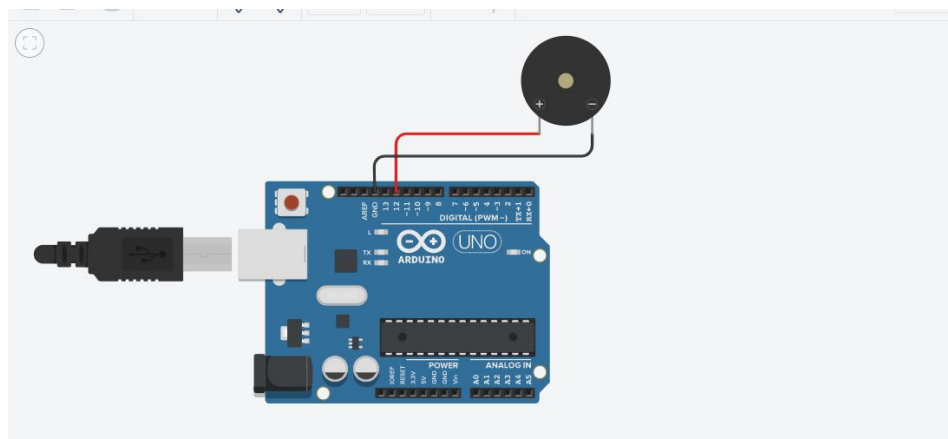
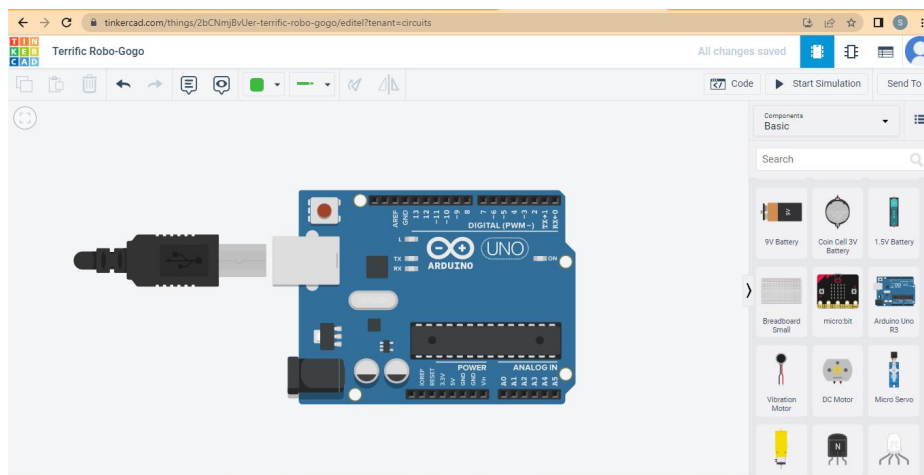


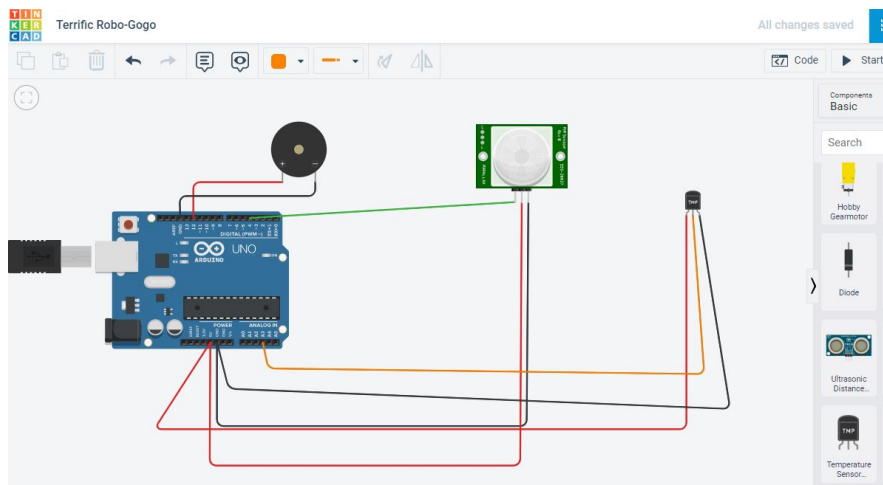
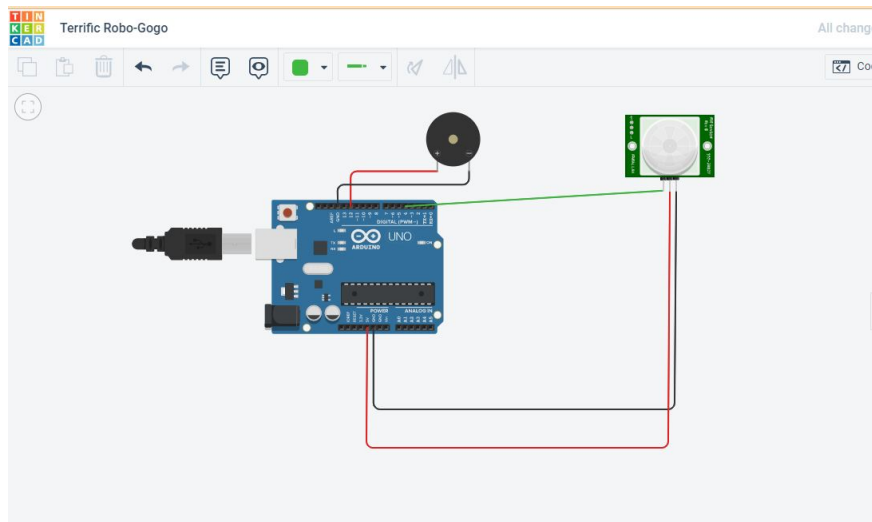
Assignment -1

Team ID	PNT2022TMID41909
Project Name	Signs with Smart Connectivity for Better Road Safety
Team Members	Manojkumar Kowsalya Monishkumar Santhosh

Question:

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{
```

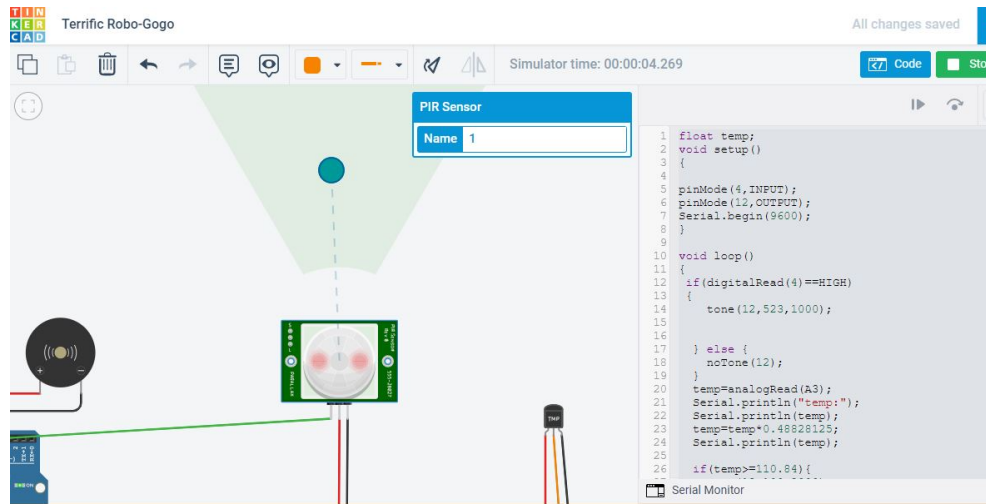
```
noTone(12);
```

```
}
```

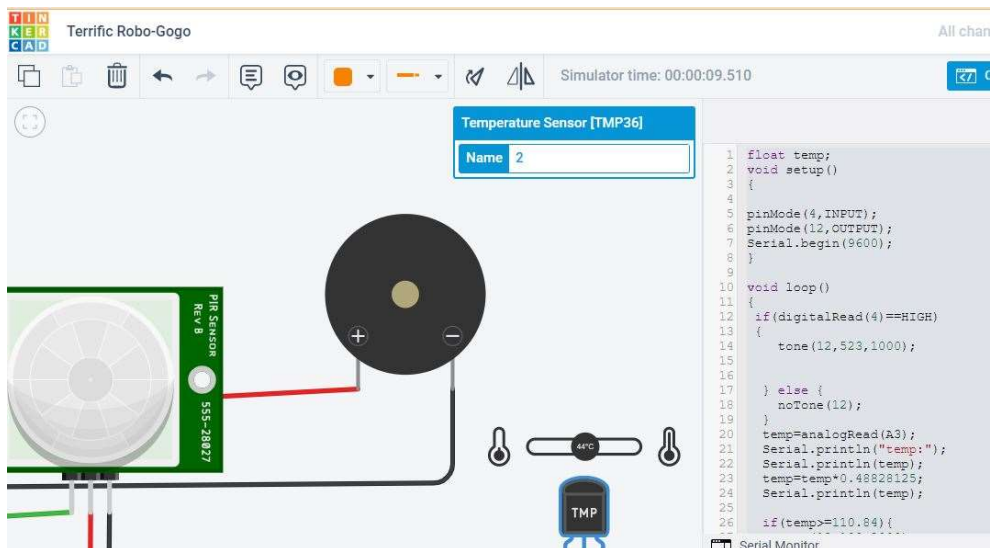
```
}
```

Output:

PIR Sensor alarm



Low Temperature:



High Temperature:

The screenshot shows an Arduino IDE simulation environment. The top toolbar includes icons for file operations, simulation control, and a status bar indicating "Simulator time: 00:00:03.886". The main workspace displays a circuit diagram with the following components and connections:

- PIR SENSOR** (REV 8, 555-28027): A green module with a white sensor lens. Its red wire is connected to a 5V supply, and its black wire is connected to ground.
- Buzzer**: A black circular component with a yellow center. Its red wire is connected to the PIR sensor's red wire, and its black wire is connected to ground.
- Temperature Sensor [TMP36]**: A blue component labeled "TMP". Its red wire is connected to a 5V supply, and its black wire is connected to ground.

A configuration window for the "Temperature Sensor [TMP36]" is open, showing "Name: 2".

The code editor on the right contains the following C++ 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   else {
17     noTone(12);
18   }
19   temp = analogRead(A3);
20   Serial.println("temp:");
21   Serial.println(temp);
22   temp = temp * 0.48828125;
23   Serial.println(temp);
24
25   if(temp >= 110.84) {
26     // ...
27   }
28 }
```

The "Serial Monitor" tab is visible at the bottom right.