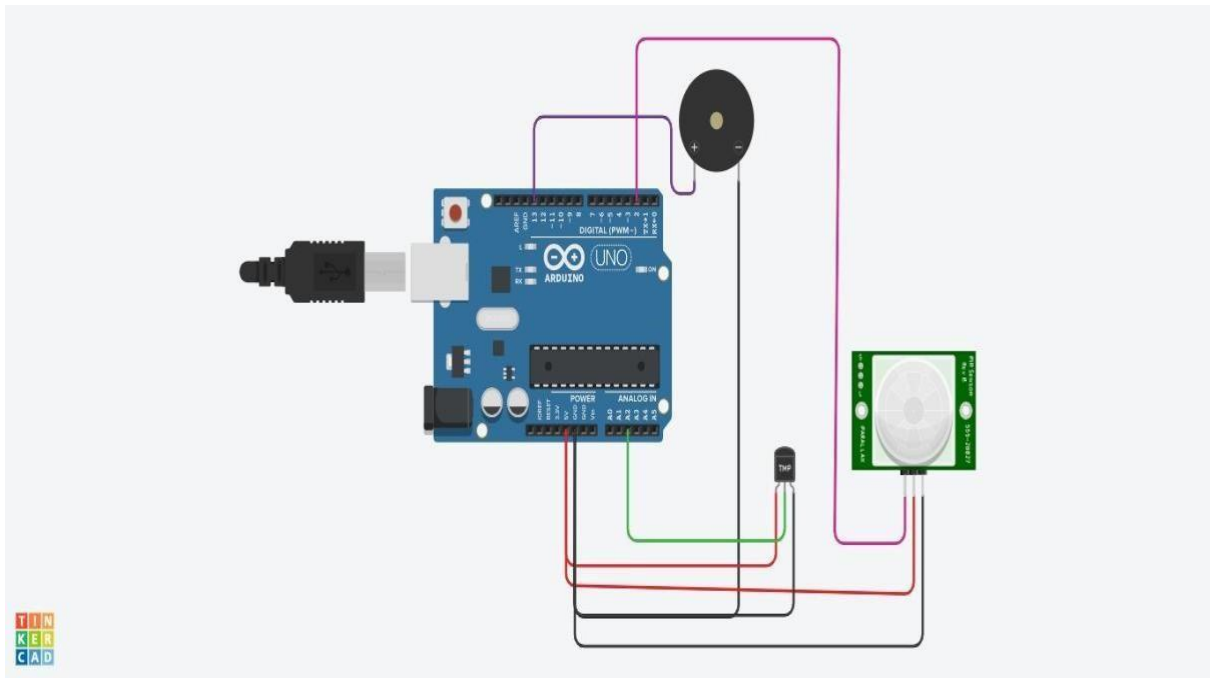


TEAMID	PNT2022TMID17666
PROJECTNAME	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING AND NOTIFICATION
NAME	VASUNTHARA D
ROLLNO	611619205055/319UIT055

ASSIGNMENT-1

Create a circuit with piezoalarm,PIRsensor,tmp sensor with below functionalities:

- 1.Alarm should sound in one manner if temp is above 60 C
- 2.Alarm should sound with another frequency if motion is detected in PIR sensor



CIRCUIT

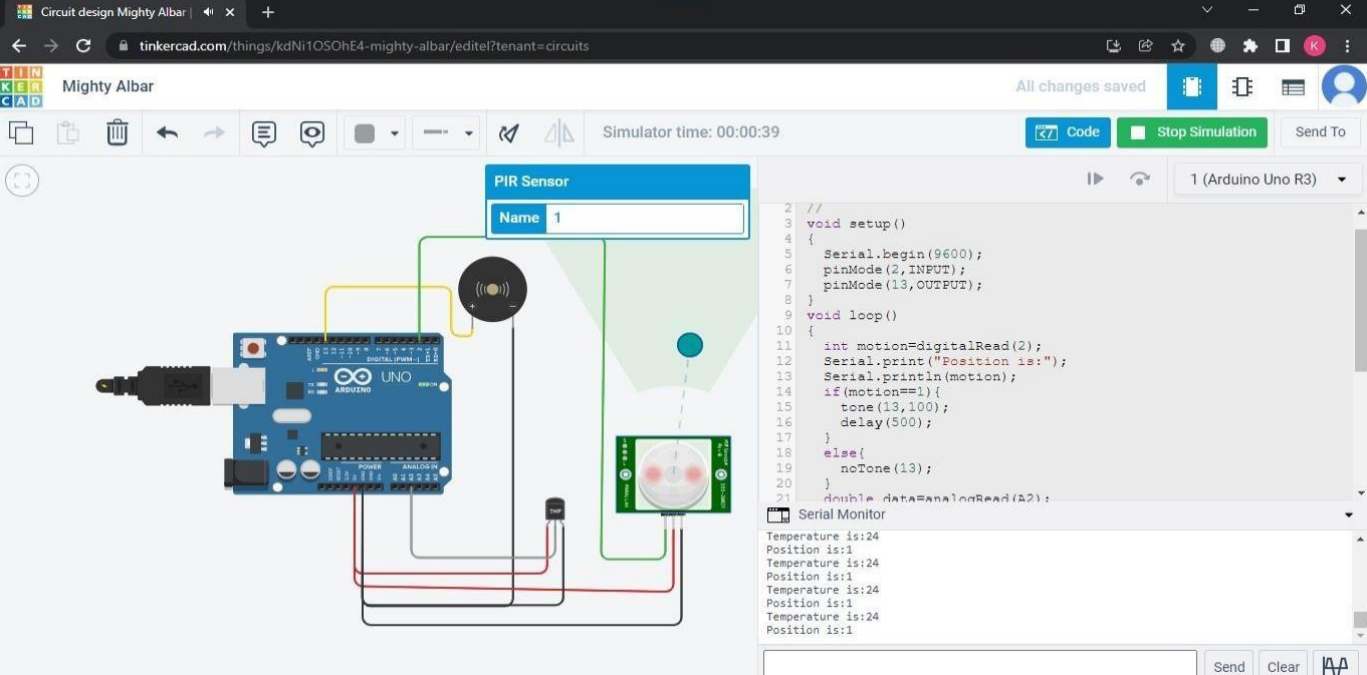
```
// C++ code
//
void setup()
{
  Serial.begin(9600);
  pinMode(2,INPUT);
  pinMode(13,OUTPUT);
}
void loop()
{
  int motion=digitalRead(2);
  Serial.print("Position is");
  Serial.println(motion);
  if(motion==1){
    tone(13,100);
    delay(500);
  }
  else{
    noTone(13);
  }
  double data=analogRead(A2);
  double n=data/1024;
  double volt=n*5;
  double off=volt-0.5;
  int temp=off*100;
  Serial.print("Temperature is:");
  Serial.println(temp);
  if(temp>=60){
    tone(13,400);
  }
}
```

```

delay(500);
}
else{
noTone(13);
}
}

```

OUTPUT :



The screenshot shows the Tinkercad interface with an Arduino Uno R3 connected to a PIR sensor and a buzzer. The PIR sensor's output is connected to digital pin 2, and the buzzer is connected to digital pin 13. The code in the editor is as follows:

```

2 //
3 void setup()
4 {
5   Serial.begin(9600);
6   pinMode(2, INPUT);
7   pinMode(13, OUTPUT);
8 }
9 void loop()
10 {
11   int motion=digitalRead(2);
12   Serial.print("Position is:");
13   Serial.println(motion);
14   if(motion==1){
15     tone(13,100);
16     delay(500);
17   }
18   else{
19     noTone(13);
20   }
21   double data=analogRead(A2);

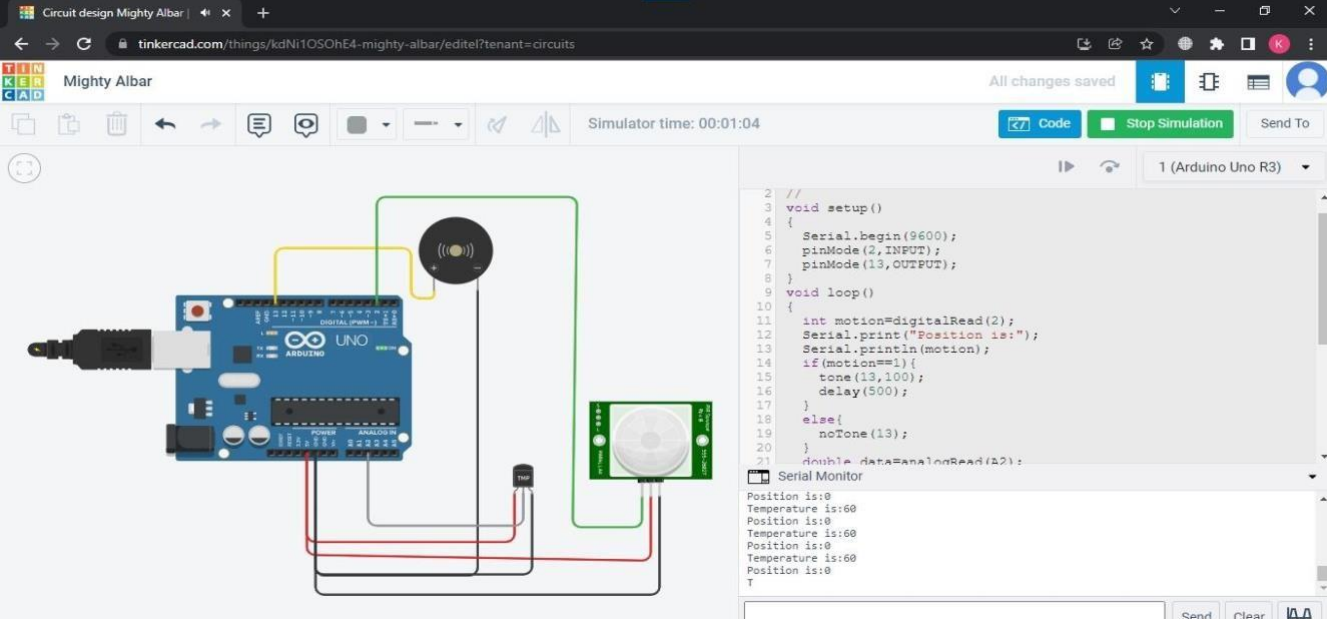
```

The Serial Monitor displays the following output:

```

Temperature is:24
Position is:1
Temperature is:24
Position is:1
Temperature is:24
Position is:1
Temperature is:24
Position is:1

```



The screenshot shows the same circuit, but the PIR sensor is now triggered (indicated by a red dot in its field of view). The buzzer is ringing. The code in the editor is the same as in the previous screenshot.

The Serial Monitor displays the following output:

```

Position is:0
Temperature is:60
Position is:0
Temperature is:60
Position is:0
Temperature is:60
Position is:0

```