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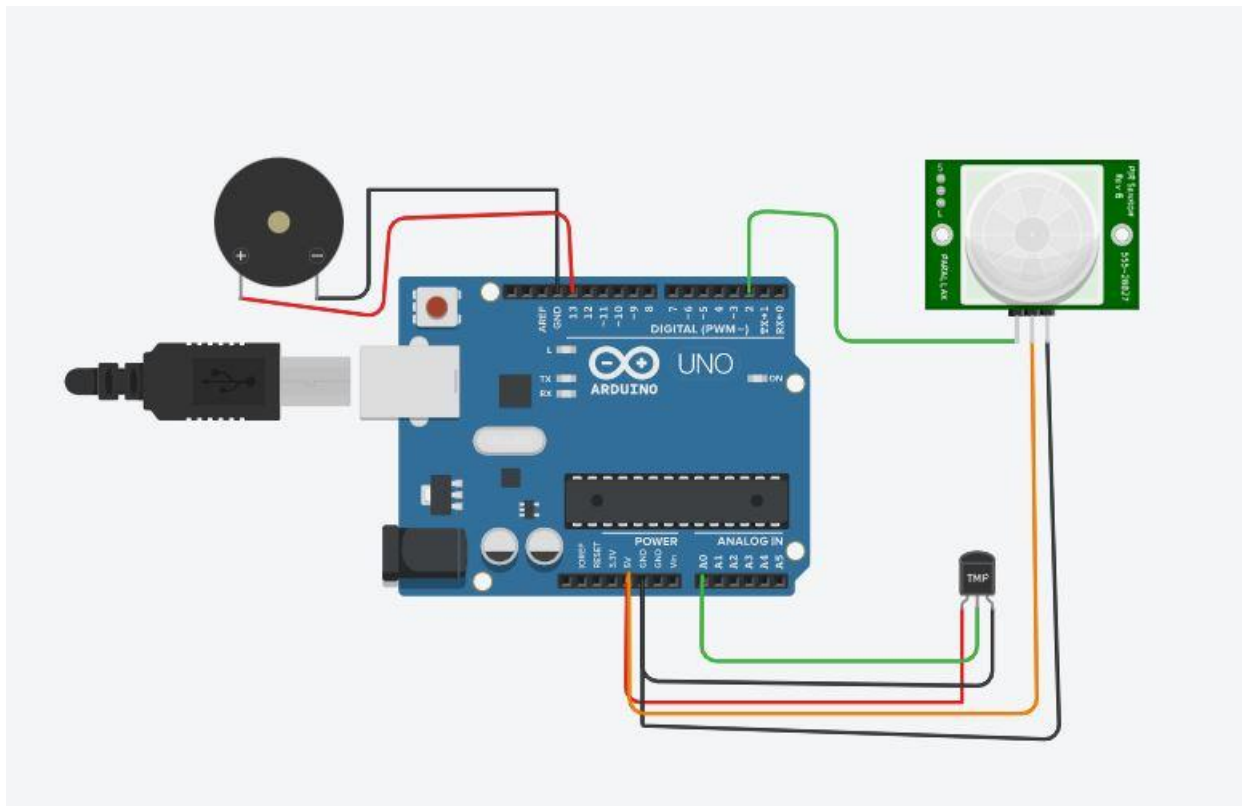
**Reg no:1919103713**

## **Assignment-I**

To create with piezo alarm, PIR sensor, temp 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 connection:**



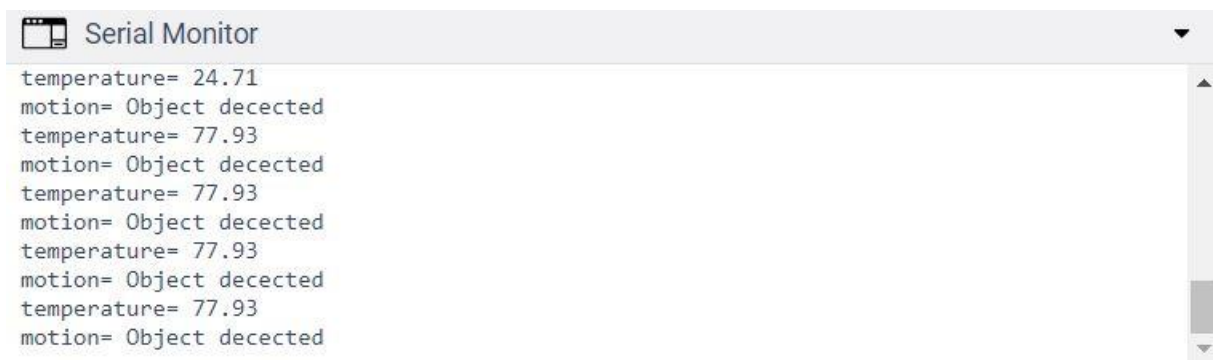
## Code:

```
void setup()
{
    Serial.begin(9600);
    pinMode(A0,INPUT);
    pinMode(2,INPUT);
    pinMode(13,OUTPUT);
}

void loop()
{
    double data=analogRead(A0);
    double n=(data/1024);
    double volt=n*5;
    double off=volt-0.5;
    double temp=off*100;
    Serial.print("temperature= ");
    Serial.println(temp);
    int pir=digitalRead(2);
    Serial.print("motion= ");
    Serial.println("Object deected");
    if(temp>60){
```

```
tone(13,100);  
  
delay(5000);  
  
noTone(13);  
  
}  
  
if(pir==1){  
  
tone(13,200);  
  
delay(5000);  
  
noTone(13);  
  
}  
  
}
```

## Output:



The screenshot shows a 'Serial Monitor' window with a list of output messages. The messages are: 'temperature= 24.71', 'motion= Object dectected', 'temperature= 77.93', 'motion= Object dectected', 'temperature= 77.93', 'motion= Object dectected', 'temperature= 77.93', 'motion= Object dectected', 'temperature= 77.93', and 'motion= Object dectected'. The word 'dectected' is misspelled in the original image. A vertical scrollbar is visible on the right side of the window.

```
Serial Monitor  
temperature= 24.71  
motion= Object dectected  
temperature= 77.93  
motion= Object dectected  
temperature= 77.93  
motion= Object dectected  
temperature= 77.93  
motion= Object dectected  
temperature= 77.93  
motion= Object dectected
```

## Working Circuit Design:

