

Assignment -1
Python Programming

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

Question-1:

Write a program to detect temperature and motion-based buzzer alarm using temperature and PIR sensor.

SOLUTION:

CODE:

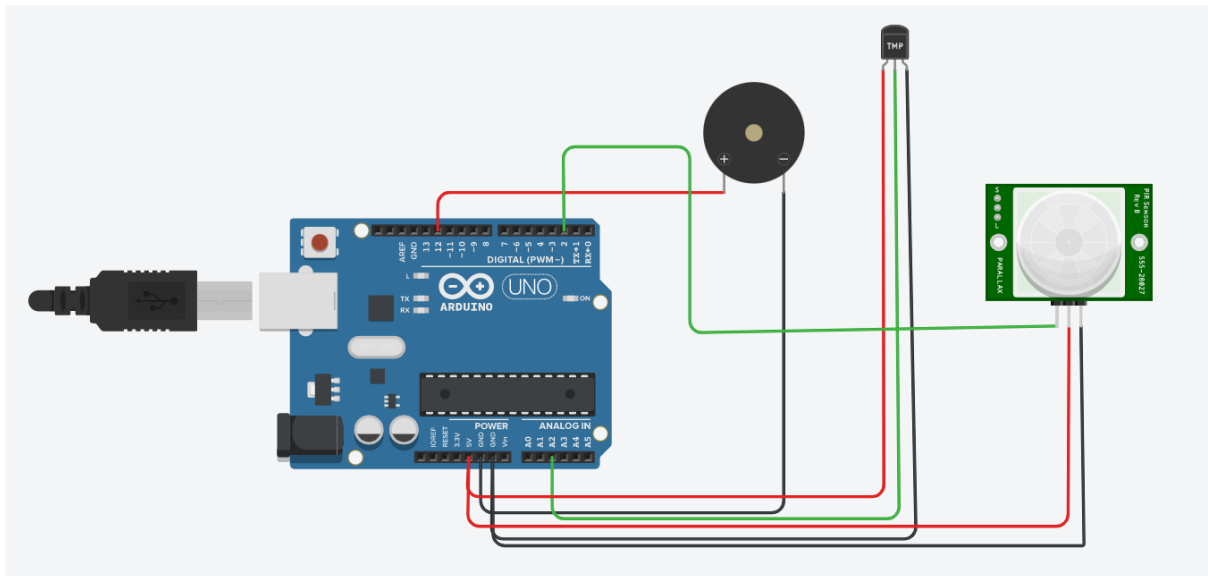
```
void setup()
{
  Serial.begin(9600);
  pinMode(2, INPUT);
  pinMode(12, OUTPUT);
}
void loop()
{
  int motion=digitalRead(2);
  if(motion==1)
  {
    Serial.println("Motion detected !");
    tone(12,10);
    delay(1000);
    noTone(12);
    delay(3000);
  }
  else
  {
    Serial.println("! No Motion detected !");
    delay(1000);
  }
  double data=analogRead(A2);
  double n=data/1024;
  double voltage=n*5;
  double offsetvol=voltage-0.5;
  double temp=offsetvol*100;
  if(temp>60)
  {
    Serial.println("Temperature is greater than 60 degrees
!");
    Serial.println(temp);
  }
}
```

```

    tone(12,100);
    delay(1000);
    noTone(12);
    delay(3000);
}
else
{
    Serial.println("Temperature is less than 60 degrees
!!!");
    Serial.println(temp);
    delay(1000);
}
}

```

CIRCUIT:



OUTPUT:

Working simulation video link:

<https://drive.google.com/file/d/1Qbud06RNyy9Y7HF0niAhRoSfYhcw7OAu/view>