

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 using Arduino UNO.

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 is detected !");
    tone(12,10);
    delay(1000);
    noTone(12);
    delay(3000);
  }
  else
  {
    Serial.println("No Motion !!!");
```

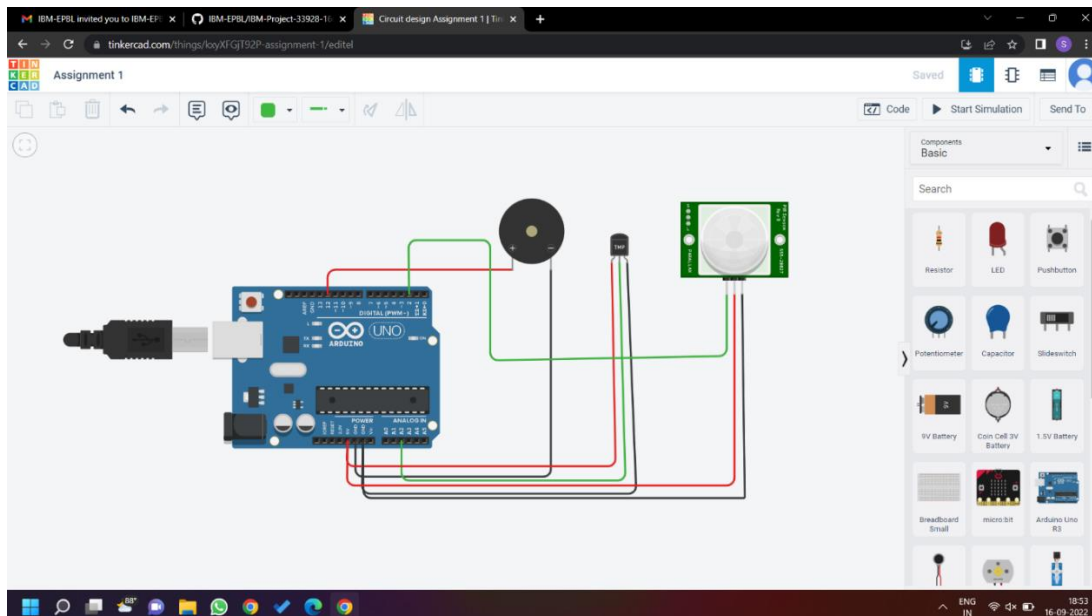
```

    delay(1000);
}

double data=analogRead(A2);
double temp=(((data/1024)*5)-0.5)*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:

Simulation video link:

<https://drive.google.com/file/d/1g46Hn9xyNwVSIj0DTTM99l4bI6nExPAq/view?usp=sharing>