**Assignment -1**

TinkerCad

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| Assignment Date | 15 sep 2022 |
| Student Name | SHARMILA J |
| Student Roll Number | 111519106143 |
| Maximum Marks | 2 Marks |

**Question-1:**

Using PIR sensor , temperature sensor and piezo alarm .create a circuit with Arduino UNO with below functionalities

1.Alarm should give one sound when there is a motion near PIR sensor

2.Alarm should sound with different sound when the temperature is above 60degrees.

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| **Solution:** |
|  | // C++ code  //  void setup()  {  Serial.begin(9600);  pinMode(13,INPUT);  pinMode(12,OUTPUT);  }  void loop()  {  double data=analogRead(A2);  double n=data/1024;  double volt=n\*5;  double off=volt-0.5;  double temperature=off\*100;  int motion=digitalRead(13);  for(int freq=4;freq&lt;=5;freq++)  {  if(temperature&gt;=60)  {  Serial.println(&quot;Temperature is above 60&quot;);  tone(12,freq);  delay(100);  }  else  {  Serial.println(&quot;Temperature is below 60&quot;);  noTone(12);  }  }  for(int freq=2;freq&lt;=3;freq++)  {  if(motion==1)  {  Serial.println(&quot;Motion Detected&quot;);  tone(12,freq);  delay(200);  }  else  {  Serial.println(&quot; No Motion&quot;);  noTone(12);  }  }  } |
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|  | #----------------------------------------#  OUTPUT: |
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