ASSIGNMENT 1

Assignment Date	16 NOVEMBER 2022
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Maximum Marks	2 Marks

```
//
C++
code
       //
       int
         t=2;
           int e=3;
          void setup()
           Serial.begin(9600);
           pinMode(t,OUTPUT);
           pinMode(e,INPUT);
           pinMode(12,OUTPUT);
           pinMode(11,OUTPUT);
          }
           void loop()
           {
           //ultrasonic sensor
           digitalWrite(t,LOW);
           digitalWrite(t,HIGH);
           delayMicroseconds(10);
           digitalWrite(t,LOW);
           float dur=pulseIn(e,HIGH);
           float dis=(dur*0.0456)/2;
           Serial.print("distance is: ");
           Serial.println(dis);
           //LED ON
           if(dis>=100)
           {
            digitalWrite(8,HIGH);
            digitalWrite(7,HIGH);
```

```
}
//Buzzer For ultrasonic Sensor if(dis>-100)
if(dis>=100)
for(int i=0; i<=30000; i=i+10)
  tone(12,i);
  delay(1000);
  noTone(12);
  delay(1000);
 }
}
//Temperate Sensor
double a= analogRead(A0);
double t=(((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: ");
Serial.println(t);
delay(1000);
//LED ON
if(t>=100)
{
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}
//Buzzer For temperature Sensor
if(t>=100)
{
for(int i=0; i<=30000; i=i+10)
tone(11,i);
delay(1000);
noTone(11);
delay(1000);
}
}
//LED OFF
if(t<=100)
{
digitalWrite(8,LOW);
digitalWrite(7,LOW);
}
 }
```

