

ASSIGNMENT 1

Assignment Date	16 NOVEMBER 2022
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Team ID	PNT2022TMID06071
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);
}
}

```

