## **ASSIGNMENT - 1**

NAME: DINESH M

REG NO: 311019106018

**COLLEGE: KCG COLLEGE OF TECHNOLOGY** 

TEAM ID: PNT2022TMID27339

```
Code:
// C++
code int
t=2;
int e=3;
void
setup()
{
      Serial.begin(9600);
     pinMode(t,OUTPUT);
     pinMode(e,INPUT);
     pinMode(12,OUTPUT);
}
void loop()
 //ultrasonic sensor
     digitalWrite(t,LOW);
     digitalWrite(t,HIGH);
```

delayMicroseconds(10);

```
digitalWrite(t,LOW);
     float dur=pulseIn(e,HIGH);
     float dis=(dur*0.0343)/2;
     Serial.print("Distance is:");
     Serial.println(dis);
 //LED ON
 if(dis>=60) //(in terms of centimeter)
 {
     digitalWrite(8,HIGH);
     digitalWrite(7,HIGH);
 }
 //Buzzer For ultrasonic
 Sensor if(dis>=60)
 {
     for(int i=0; i<=5; i=i+1)
 {
 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>=20)
               //(in terms of celsius)
 {
     digitalWrite(8,HIGH);
     digitalWrite(7,HIGH);
 }
 //Buzzer for Temperature
 Sensor if(t>=20)
 {
     for(int i=0; i<=5; i=i+1)
 {
     tone(12,i);
     delay(1000);
     noTone(12);
     delay(1000);
 }
 }
//LED OFF
if(t<20)
```

```
{
    digitalWrite(8, LOW);
    digitalWrite(7, LOW);
}
```