IBM TASK : 1

**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,LO W);

digitalWrite(7,LO W); }

}