// C++ code

//

int a=2;int b=3;

void setup()

{

Serial. Begin(9600);

pin Mode(a, OUTPUT);

pin Mode(b,INPUT);

pin Mode(12,OUTPUT);

}

void loop()

{

//ultrasonic sensor

digital Write(a, LOW);

digital Write(b,HIGH);

delay Microseconds(10);

digital Write(a, LOW);

float dur=pulseIn(b,HIGH);

float dis=(dur\*0.0343)/2;

Serial. Print("Distance is: ");

Serial.println(dis);

//LED ON

if(dis>=100)

{

digital Write(8,HIGH);

}

else

{

digital Write(8,LOW);

}

//Buzzer For ultrasonic Sensor

if(dis>=100)

{

digital Write(12,HIGH);

delay(500);

}

else

{

digital Write(12,LOW);

delay(500);

}

//Temperate Sensor

double a= analogRead(A4);

double t=(((a/1024)\*5)-0.5)\*100;

Serial. Print ("Temp Value: ");

Serial.println(a);

//LED ON

if(t>=100)

{

digital Write(7,HIGH);

}

else

{

digital Write(7,LOW);

}

//Buzzer for Temperature Sensor

if(t>=100)

{

digital Write(12,HIGH);

delay(500);

}

else{

digital Write(12,LOW);

delay(500);

}

}