// C++ code

//

int b = 0;

int celsius = 0;

void setup()

{

pinMode(12,OUTPUT);

pinMode(11,OUTPUT);

pinMode(2,OUTPUT);

pinMode(3,INPUT);

pinMode(10,OUTPUT);

pinMode(A3,INPUT);

Serial.begin(9600);

}

void loop()

{

b = 40;

celsius = map(((analogRead(A3) - 20) \* 3.04), 0, 1023, -40, 125);

float dur = pulseIn(3,HIGH);

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

Serial.println(dis);

Serial.println(celsius);

if(dis>50.00){

digitalWrite(10,HIGH);

digitalWrite(12,HIGH);

delay(1000);}

else{

digitalWrite(10,LOW);

digitalWrite(12,LOW);

delay(1000);}

if(celsius<b){

digitalWrite(11,HIGH);

delay(1000);}

else{

digitalWrite(11,LOW);

delay(1000);}

digitalWrite(10,HIGH);

delay(1000);

digitalWrite(10,LOW);

delay(1000);

digitalWrite(12,HIGH);

delay(1000);

digitalWrite(12,LOW);

delay(1000);

}