int trig =2;

int echo=3;

void setup()

{

pinMode(trig,OUTPUT);

pinMode(echo,INPUT);

Serial.begin(9600);

pinMode(4,OUTPUT);

Serial.begin(9600);

pinMode(9,OUTPUT);

pinMode(7,INPUT);

pinMode(12,OUTPUT);

Serial.begin(9600);

pinMode(7,INPUT);

Serial.begin(9600);

pinMode(12,OUTPUT);

}

void loop()

{

digitalWrite(trig,LOW);

digitalWrite(trig,HIGH);

delayMicroseconds(10);

digitalWrite(trig,LOW);

float dur = pulseIn(echo,HIGH);

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

Serial.print("distance is :");

Serial.println(dist);

if(dist<=100)

{

digitalWrite(4,HIGH);

}

else

{

digitalWrite(4,LOW);

}

double a=analogRead(A1);

Serial.print("Adc Value:");

Serial.println(a);

double v= a/1024;

double tvolt=v\*5;

Serial.print("temp value voltage:");

Serial.println(tvolt);

double o = tvolt-0.5;

double t=o\*100;

Serial.print("temperature is :");

Serial.println(t);

if (t>=50)

{

digitalWrite(9,HIGH);

}

else

{

digitalWrite(9,LOW);

}

int m=digitalRead(7);

Serial.print("motion detected:");

Serial.println(m);

if(m==1)

{

Serial.println("yes");

digitalWrite(12,HIGH);

}

else

{

Serial.println("no");

digitalWrite(12,LOW);

}

}