int t=7;

int e=3;

void setup()

{

Serial.begin(9600);

pinMode(t,OUTPUT);

pinMode(e,INPUT);

pinMode(13,OUTPUT);

pinMode(12,OUTPUT);

pinMode(2,INPUT);

}

void loop()

{

int p=digitalRead(2);

Serial.println(p);

if(p)

{

digitalWrite(13,HIGH);

Serial.println("motion detected and led on!!");

}

else

digitalWrite(13,LOW);

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 : ");

Serial.println(dis);

Serial.println(" cm");

if(dis>100)

digitalWrite(12,HIGH);

else

digitalWrite(12,LOW);

}