int trigger\_pin = 2;

int echo\_pin= 3;

int buzzer\_ pin = 10;

int time;

int distance;

void setup()

{

Serial.begin(9600);

pinMode (trigger\_pin, OUTPUT);

pinMode (echo\_pin, INPUT);

pinMode (buzzer pin, OUTPUT);

}

void loop()

{

digitalwrite (trigger\_pin, HIGH);

delayMicroseconds (10);

digitalwrite (trigger\_pin, LOW);

time= pulseIn (echo\_ pin, HIGH);

distance = (time \* 0.034) / 2;

if (distance <= 10)

{

Serial.println("Door Open ");

Serial.print ("Distance=");

Serial.println (distance);

digitalwrite (buzzer\_pin, HIGH);

delay (500):

}

else {

Serial.println(" Door closed ");

Serial.print ("Distance= ");

Serial.println (distance);

digitalwrite (buzzer\_pin, LOW);

delay (500);

}