ASSIGMENT -2

Develop an "Automatic garage door opening system". Use an Ultrasonic sensor to detect if there is a vehicle in front of the garage. if any vehicle is detected open the garage door (rotate the servo motor) for some time and close it.

#include<Servo.h>

Servo myservo;

int trigpin=4;

int echopin=7;

void setup()

{

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

Serial.begin(9600);

myservo.attach(4);

}

void loop()

{

digitalWrite(trigpin,HIGH);

delay(100);

digitalWrite(trigpin,LOW);

int dur=pulseIn(echopin,HIGH);

int dis=(dur\*0.034)/2;

Serial.print("the distance is:");

Serial.println(dis);

if(dis<100)

{

for(int pos=0;pos<=180;pos++)

myservo.write(pos);

delay(100);

for(int pos=180;pos>=0;pos--)

myservo.write(pos);

delay(100);

}

else

{

myservo.write(0);

delay(100);

}

delay(100);

}