ASSIGNMENT-2

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```
#include<Servo.h>

Servo s;

void setup()

{

pinMode(3, OUTPUT);

pinMode(4, INPUT);

Serial.begin(9600);

s.attach(5);

}

void loop()

{

digitalWrite(3, LOW);

delayMicroseconds(2);

digitalWrite(3, HIGH);

delayMicroseconds(10);

digitalWrite(3, LOW);


float duration = pulseIn(4, HIGH);

float distance= duration*0.034/2;

Serial.print("Distance: ");

Serial.println(distance);

  if (distance<25){

for(int i=0;i<=180;i++){

s.write(i);

delay(50);}

delay(200);
```

Serial.print("Vehicle has approached, Opening Gate!!");

for(int j=180;j>=0;j--){

s.write(j);

delay(50);}

delay(200);

}

}