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**ASSIGNMENT 2**

#include<Servo.h>

Servo myservo;

int trigpin=2;

int echopin=6;

void setup()

{

pinMode(trigpin,OUTPUT);

pinMode(echopin,INPUT);

myservo.attach(12);

Serial.begin(9600);

}

void loop()

{

digitalWrite(trigpin,HIGH);

delay(1000);

digitalWrite(trigpin,LOW);

float duration=pulseIn(echopin,HIGH);

float distance=(duration\*0.034)/2;

Serial.println("the distance is");

Serial.println(distance);

if(distance>=100){

myservo.write(0);

Serial.println("servo is at a angle 0");

delay(1000);

myservo.write(90);

Serial.println("servo is at a angle 90");

delay(1000);

myservo.write(180);

Serial.println("servo is at a angle 180");

delay(1000);

myservo.write(0);

Serial.println("servo is at a angle 0");

delay(1000);

}

}

