

Code for Graph Radar System

```
#include <Servo.h>

const int trigPin = 8;

const int echoPin = 9;

// defining time and distance

long duration;

int distance;

Servo myServo; // Object servo

void setup() {

  pinMode(trigPin, OUTPUT); // trigPin as an Output

  pinMode(echoPin, INPUT); // echoPin as an Input

  Serial.begin(9600);

  myServo.attach(10); // Pin Connected To Servo
}

void loop() {

  // rotating servo i++ depicts increment of one degree
  for(int i=15;i<=165;i++){

    myServo.write(i);

    delay(30);

    distance = calculateDistance();

    Serial.print(i);

    Serial.print(",");

    Serial.print(distance);

    Serial.print(".");

  }

  // Repeats the previous lines from 165 to 15 degrees
  for(int i=165;i>15;i--){

    myServo.write(i);

    delay(30);

    distance = calculateDistance();

    Serial.print(i); Serial.print(",");
```

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```
Serial.print(distance);  
Serial.print(".");  
}  
}  
  
int calculateDistance(){  
  
    digitalWrite(trigPin, LOW);  
    delayMicroseconds(2);  
    // Sets the trigPin on HIGH state for 10 micro seconds  
    digitalWrite(trigPin, HIGH);  
    delayMicroseconds(10);  
    digitalWrite(trigPin, LOW);  
    duration = pulseIn(echoPin, HIGH);  
    distance= duration*0.034/2;  
    return distance;  
}
```