

If the distance is lesser than 25cm, the angle of the servo motor is 0.
If the distance is 26 - 150, the angle of the servo motor is 90.
If the distance is higher than 150, the angle of the servo motor is 180.

```
1 // Distance sensor controlling servo motor
2 int TRIG_blue = 10;
3 int ECHO_pink = 9;
4 int SERVO_orange = 3;
5 Servo servo;
6 long duration = 0;
7 long cm = 0;
8
9 void setup() {
10   pinMode(TRIG_blue, OUTPUT);
11   pinMode(ECHO_pink, INPUT);
12   servo.attach(SERVO_orange);
13   servo.write(0);
14   Serial.begin(9600);
15 }
16
17 void loop() {
18   digitalWrite(TRIG_blue, HIGH);
19   delayMicroseconds(100);
20   digitalWrite(TRIG_blue, LOW);
21
22   duration = pulseIn(ECHO_pink, HIGH);
23   cm = (duration/2)/28.5;
24
25   if(cm < 25){
26     servo.write(0);
27   }
28   else if(cm > 26 && cm<150){
29     servo.write(90);
30   }
31   else if(cm > 150){
32     servo.write(180);
33   }
34
35   Serial.print("distance: ");
36   Serial.print(cm);
37   Serial.println(" cm");
38   delay(5000);
39 }
```

Serial Monitor