```
int trigPin = 11;    // Trigger
int echoPin = 12;    // Echo
long duration, cm;
#include <Servo.h>

int pos = 0;

Servo servo_9;

void setup() {
  //Serial Port begin
  Serial.begin (9600);
  //Define inputs and outputs
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  servo_9.attach(9, 500, 2500);
}

void loop() {
  // The sensor is triggered by a HIGH pulse of 10 or more microseconds.
  // Give a short LOW pulse beforehand to ensure a clean HIGH pulse:
  digitalWrite(trigPin, LOW);
  delayMicroseconds(5);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  // Read the signal from the sensor: a HIGH pulse whose
  // duration is the time (in microseconds) from the sending
  // of the ping to the reception of its echo off of an object.
  duration = pulseIn(echoPin, HIGH);

  // Convert the time into a distance
  cm = (duration/2) / 29.1;     // Divide by 29.1 or multiply by 0.0343

  Serial.print(cm);
  Serial.print("cm");
  Serial.println();
  if (cm<21){
    if (cm < 9) {
```

```
      for (pos = 360; pos >= 0; pos -= 1) {
      // tell servo to go to position in variable 'pos'
      servo_9.write(pos);
      // wait 15 ms for servo to reach the position
      delay(30); // Wait for 15 millisecond(s)
      break;
      }
    }
    if (cm > 15) {
      for (pos = 0; pos <= 360; pos += 1) {
      // tell servo to go to position in variable 'pos'
      servo_9.write(pos);
      // wait 15 ms for servo to reach the position
      delay(30); // Wait for 15 millisecond(s)
      break;
      }
    }
  delay(250);
  }
}
```