```
#include <Servo.h>
int pos = 0;
Servo servo_9;
void setup()
 servo_9.attach(9, 500, 2500);
}
void loop()
 // sweep the servo from 0 to 180 degrees in steps
 // of 1 degrees
 for (pos = 0; pos \le 180; 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(15); // Wait for 15 millisecond(s)
 }
 for (pos = 180; 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(15); // Wait for 15 millisecond(s)
}
```