

## Project 7 - Motors

Copy and Paste the code below into the Arduino sketch window. Verify and upload the code to the board.

### Introduction to Motors

```
// Project 7 - Servo Motor set up
```

```
#include <Servo.h>
Servo servo1;
int servoPin = 9;

void setup(){
  servo1.attach(servoPin);
}

void loop(){
  servo1.write(0);
  delay(1000);
  servo1.write(90);
  delay(1000);
  servo1.write(180);
  delay(1000);
}
```

### Controlling the Servo

```
#include <Servo.h>
int LowLed = 5;
int HiLed = 6;
Servo servo1;
int pot = A0;
int val;

void setup() {
  servo1.attach(9);
  pinMode(LowLed, OUTPUT);
  pinMode(HiLed, OUTPUT);
  Serial.begin(9600);
}
```

```
void loop() {  
  val = analogRead(pot);  
  val = map(val, 0, 1023, 0, 180);  
  servo1.write(val);  
  Serial.println(val);  
  if (val == 0)  
    digitalWrite(LowLed, HIGH);  
  if (val == 180)  
    digitalWrite(HiLed, HIGH);  
  if (val > 0)  
    digitalWrite(LowLed, LOW);  
  if (val < 180)  
    digitalWrite(HiLed, LOW);  
  delay(10);  
}
```