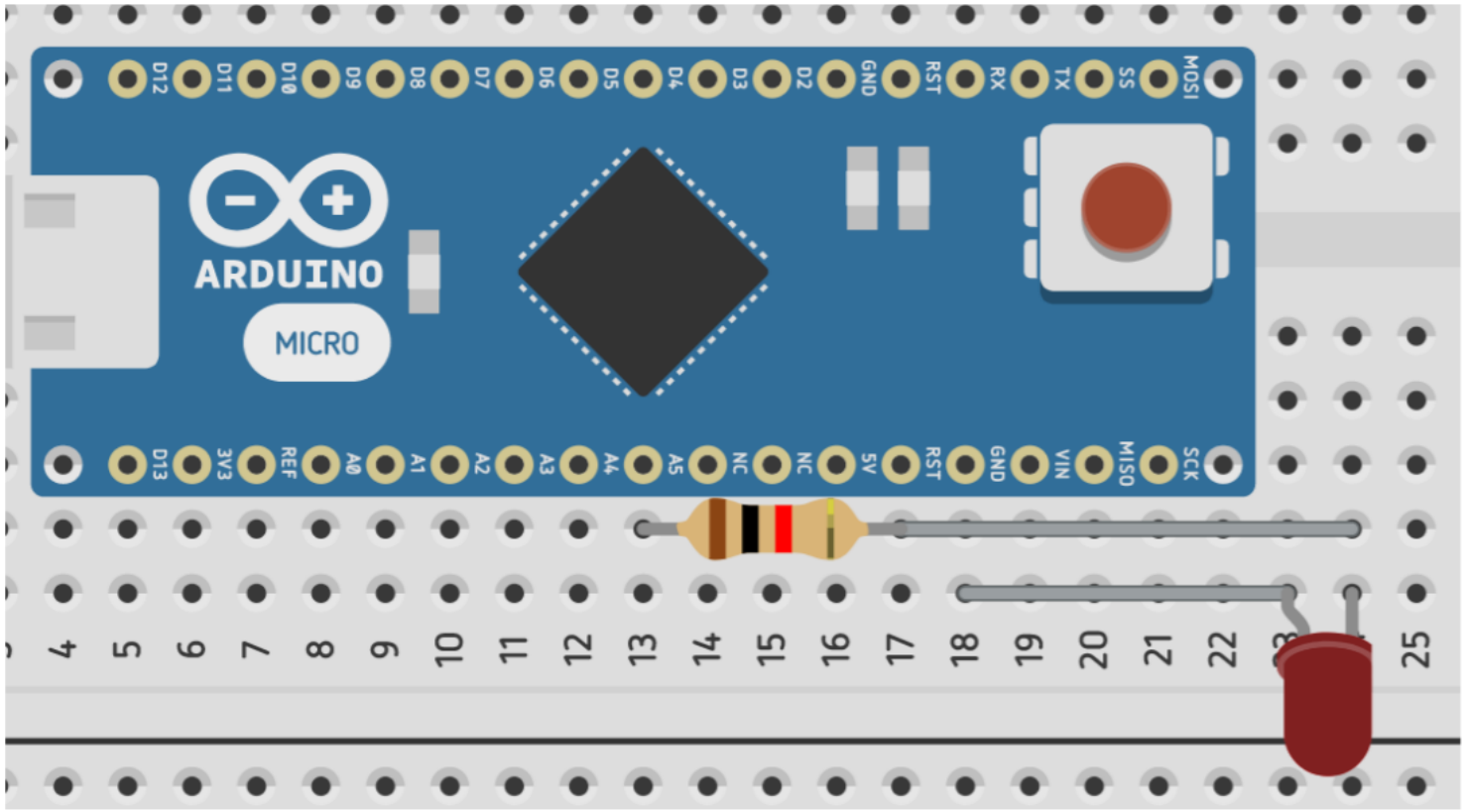
Servo Motor Instructions

Make sure you have finished the LED Arduino activity

- Board should look something like this



Get servo motor and long wire. Connect them.

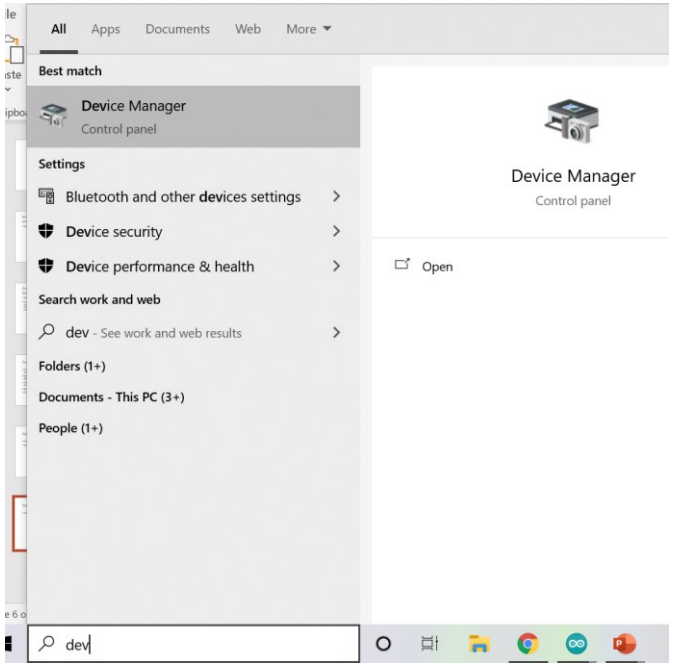
- The colors will probably not match up THAT’S OKAY
- In the subsequent slides, when I talk about wire colors, I will be referencing the colors of the servo motor’s wires. So basically, ignore the color of the long wire and just pay attention to what it’s connected to.

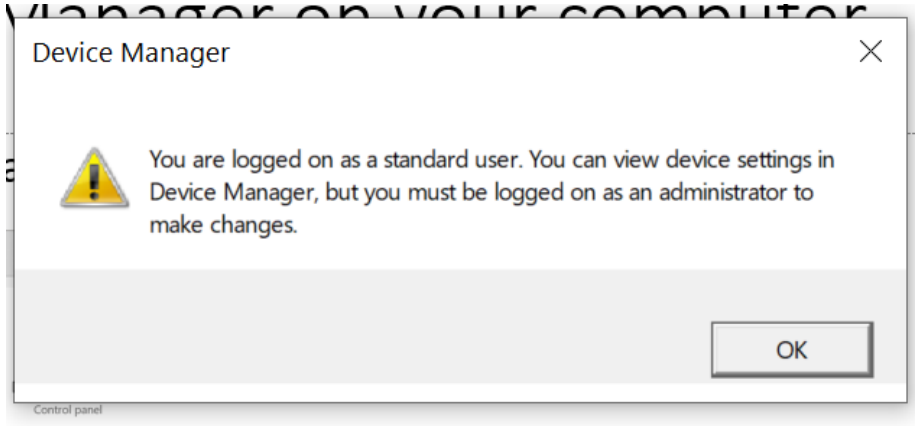
Connect wires to breadboard.

- One end of the long wire should be stuck with the servo motor, the other end of long wire needs to go in the breadboard.
- REMEMEBER THE COLORS I SAY REFER TO THE **SERVO MOTOR WIRES COLOR**
- The brown wire should go to h16 on breadboard (GND pin on Arduino)
- Red should go to a16 (5V on Arduino)
- Orange should go to i14 (D3 on Arduino)

Open Device Manager on your computer

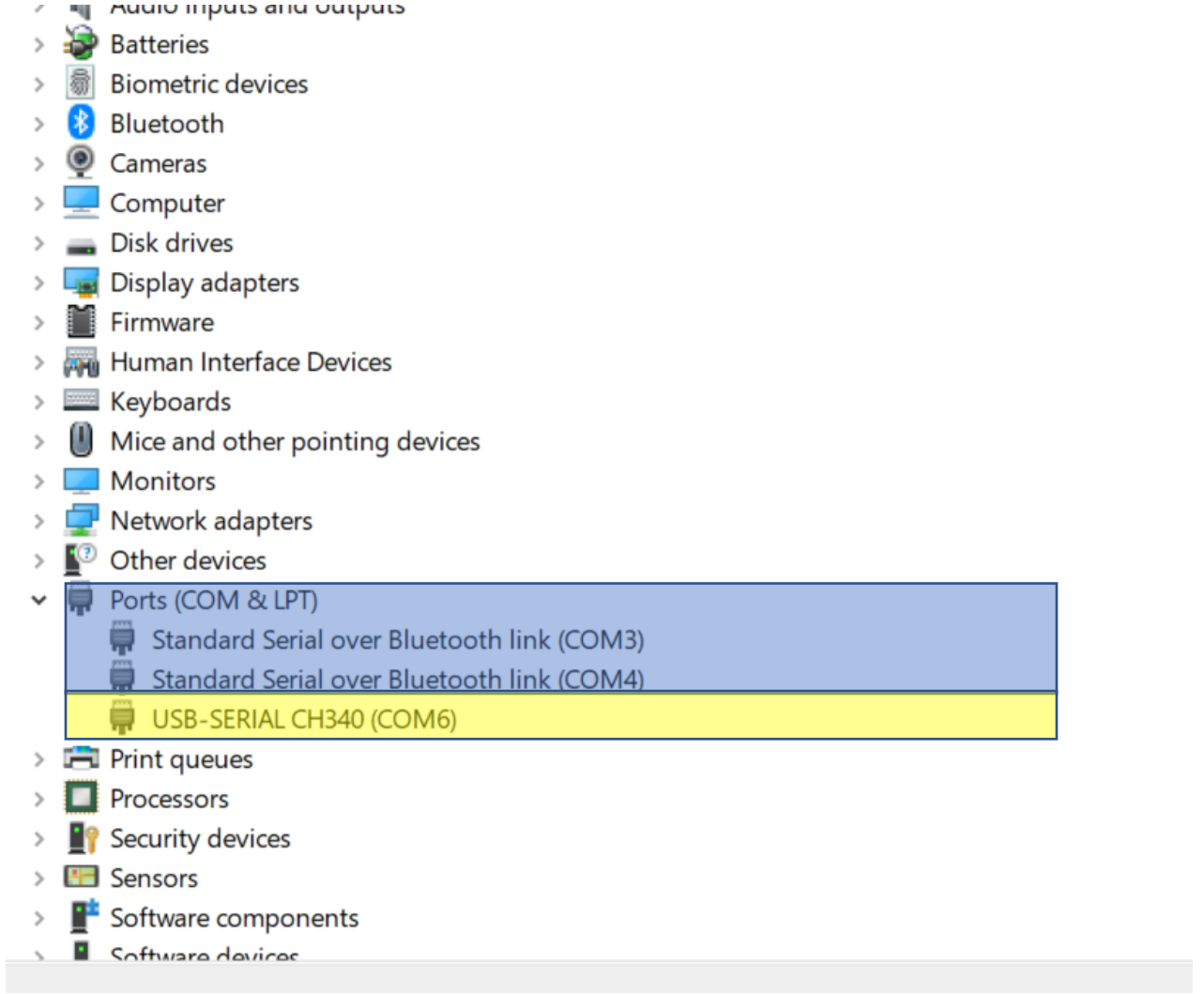
- Search “device manager in the app searcher”. Open it
- This error message might pop up. Click OK



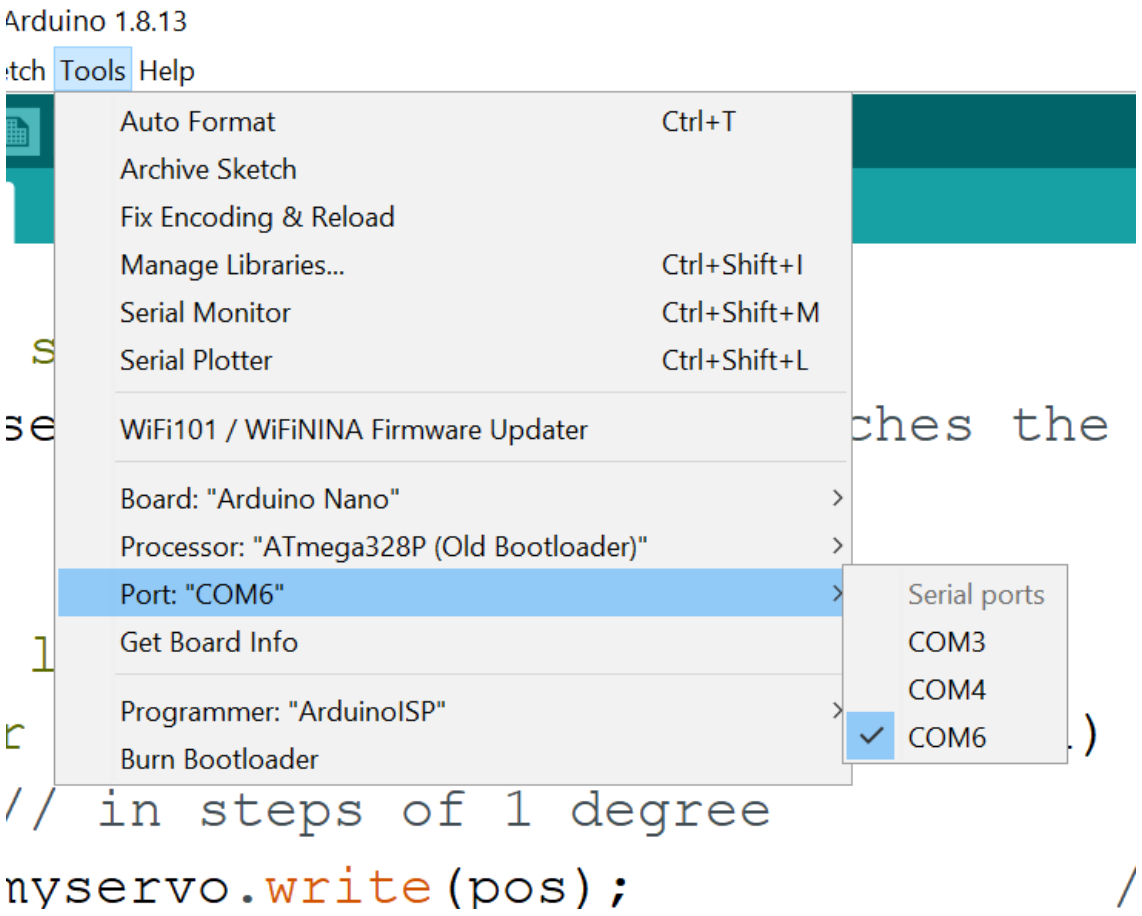


Click the port option dropdown. Look at what drops down.

- Look for the port that says CH340. Read the thing in parentheses. In my case, it is COM6.
- REMEMBER WHAT THE THING IN PARENTHESES IS



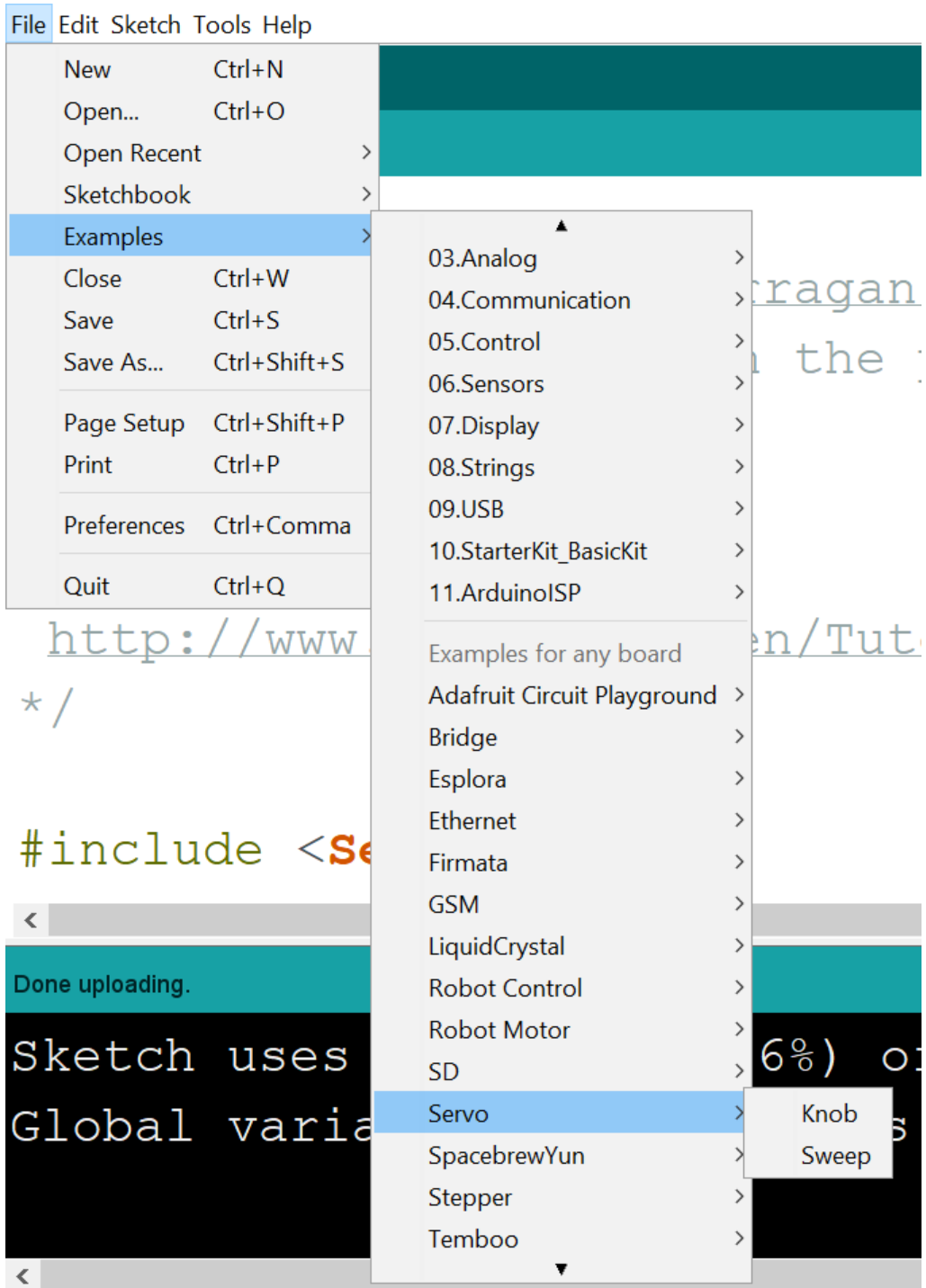
Open Arduino and click tools at the top



Hit the port option and select the port code that you memorized from the previous step. In my case, it's COM6.

Open Arduino

- Follow this file path
- Select sweep



Look at the Arduino code. It should look like this (but include more since some of it is cut off in the picture)

```
void setup() {
  myservo.attach(3);  // attaches the servo on pin 9 to the servo


void loop() {
  for (pos = 0; pos <= 180; pos += 1) { // goes from 0 degrees to
    // in steps of 1 degree
    myservo.write(pos);              // tell servo to go to posit
    delay(15);                       // waits 15ms for the servo
  }
  for (pos = 180; pos >= 0; pos -= 1) { // goes from 180 degrees
    myservo.write(pos);              // tell servo to go to posit
    delay(15);                       // waits 15ms for the servo
```

Change the one number to 3.

Instead of whatever number used to be there, put 3.

```
void setup() {
  myservo.attach(3);
}
```

Plug in your Arduino and upload the code.

- Your servo should start moving after a while. It will do a sweeping motion.