



Software

Arduino IDE

The image shows a composite of two screenshots. On the left is the Arduino website's 'Download the Arduino Software' page, featuring the Arduino logo and text for version 1.6.3. On the right is a screenshot of the Arduino IDE software interface, showing a menu bar, a toolbar, a code editor with a sample sketch, and a terminal window.

ARDUINO 1.6.3
The open-source Arduino Software (IDE) makes it easy to write code and upload it to the board. It runs on Windows, Mac OS X, and Linux. The environment is written in Java and based on Processing and other open-source software.
This software can be used with any Arduino board. Refer to the Getting Started page for installation instructions.

```
File Edit Sketch Tools Help  
sketch_apr26a  
void setup() {  
  // put your setup code here, to run once:  
}  
void loop() {  
  // put your main code here, to run repeatedly:  
}
```

1 Arduino Uno on COM1

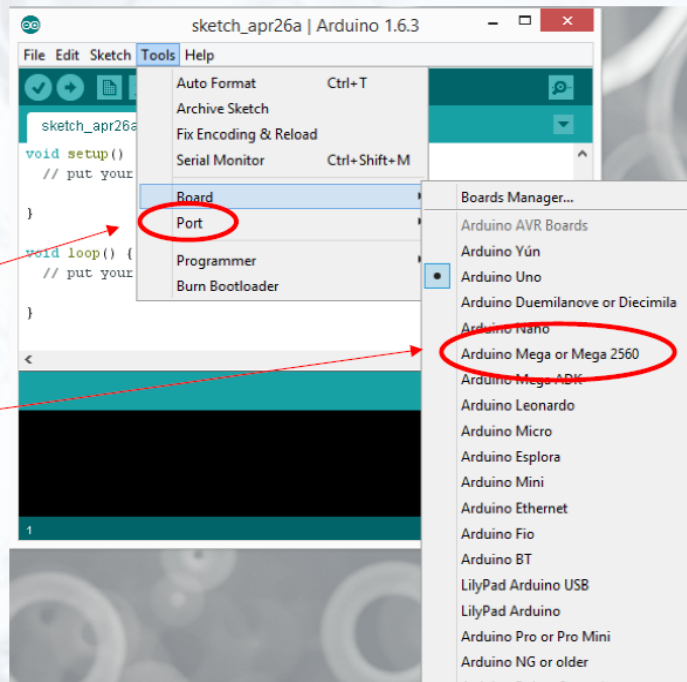
Software

Arduino IDE



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- Plug in your Arduino via USB
- Select the Port
- Select the board





Software

Code and libraries

Library

Variables

Start-up
conditions

Code

Functions

```
File Edit Sketch Tools Help
Knob$
#include <Servo.h>

Servo myservo; // create servo object to control a servo

int potpin = 0; // analog pin used to connect the potentiometer
int val; // variable to read the value from the analog pin

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

void loop()
{
  val = analogRead(potpin); // reads the value of the potentiometer (value between 0 and 1023)
  val = map(val, 0, 1023, 0, 180); // scale it to use it with the servo (value between 0 and 180)
  myservo.write(val); // sets the servo position according to the scaled value
  delay(15); // waits for the servo to get there
}
```



Software

Serial Monitor - Debugging and troubleshooting

As your coding, output the values to the serial Monitor.

```
File Edit Sketch Tools Help
[Icons]
AnalogReadSerial$

void setup() {
  // initialize serial communication at 9600 bits per second:
  Serial.begin(9600);
}

void loop() { // read the input on analog pin 0:
  int sensorValue = analogRead(A0);
  Serial.println(sensorValue); // print out the value you read:
  delay(1); // delay in between reads for stability
}
```

Serial Monitor settings: Autoscroll, No line ending, 9600 baud

Software

Verify and Upload



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Verify

Upload

```
File Edit Sketch Tools Help
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