

# Command line cheatsheet

Max/Unix	Windows	Description
<code>mkdir &lt;folder&gt;</code>	<code>mk &lt;folder&gt;</code>	Creates a folder named <folder>
<code>cd &lt;path&gt;</code>	<code>cd &lt;path&gt;</code>	Moves to the path <path>
<code>rm &lt;file&gt;</code>	<code>erase &lt;file&gt;</code>	Deletes the file <file>
<code>rm -r &lt;folder&gt;</code>	<code>rmdir &lt;folder&gt;</code>	Removes the folder <folder>
<code>ls</code>	<code>dir</code>	List the content of the current folder
<code>cp &lt;in&gt; &lt;out&gt;</code>	<code>copy &lt;in&gt; &lt;out&gt;</code>	Copies the file/folder <in> into <out>
<code>mv &lt;in&gt; &lt;out&gt;</code>	<code>rename &lt;in&gt; &lt;out&gt;</code>	Moves/renames the file/folder <in> into <out>

**Remember to tab every couple of characters to trigger the autocomplete.**

Optional: on windows you can install <http://www.cygwin.com/> which is a unix terminal.

## Example:

When you open the terminal you are in your home folder (where the Documents, Download, Desktop folders are located)

<b>cd Desktop</b>	changes the current folder to the Desktop.
<b>ls</b>	lists all files you have on the desktop
<b>mkdir java</b>	creates a new folder called java
<b>cd java</b>	changes to current folder to Desktop/java
<b>ls</b>	lists all file into the newly created folder (empty)
<b>cd ..</b>	changes the current folder back to the Desktop

## Text editor

You can use any text editor you like, here some suggestions

### WINDOWS

- Notepad++
- Atom
- Vim
- Emacs
- Sublime
- ...

### MAC/UNIX

- Vim
- Emacs
- Sublime
- ...

# Install java

Go to <http://www.oracle.com/technetwork/java/javase/downloads/index.html> and download the JDK (Java developer kit). To verify that you have installed java, in the terminal type:

```
javac --version
```

This should print your version of the java compiler (typically 9.x.x).

## WINDOWS

If the previous command fails and you get an error like

“is not recognised as an internal or external command, operable program or batch file”

It is likely because you have issued the **javac** command from a directory where the Java compiler is not installed.

To correct the problem, you need to set the path environment variable so that the compiler can be found when invoked.

You can set the path using the following steps:

1. Open System properties (run sysdm.cpl)
2. Go to Advanced tab
3. Click on Environment variables
4. Under System Variables scroll down to find PATH. Edit the entry and add the path to the compiler. For example, if the JDK path is C:\Program Files(x86)\Java\jdk1.8.0\_121\bin, enter this path. (Note: the bin subdirectory is where java and javac reside.)
5. Click OK and close the windows.
6. Open a new terminale and run **set path**. Look carefully at the output of the command; you should be able to see the JDK path you just added. Note that if **you run the command from a window which was opened before you modified the PATH variable, it will print the old path.**
7. Try to run **javac --version**

# My first java program

Open the text editor and create a new file. Insert this code:

```
class Main
{
    public static void main(String[] args)
    {
        System.out.print("Hello World!");
    }
}
```

Save the file as Main.java. Open a terminal and navigate where the file is located. For example if you save the file on folder named “java” on the Desktop, type

```
cd Desktop/java
```

check if you are in the correct folder and the file is there by listing the content of the folder.

Call the java compiler to generate the binary file (Main.class):

```
javac Main.java
```

Run the binary by calling

```
java Main
```

**Note: do not add any extension to the file**