

Notepad++

The COMPSCI 101 Text Editor for Windows



The text editor that we will be using in the Computer Science labs for creating our Java programs is called Notepad++ and is freely available for the Windows operating system. If you plan to do work outside of the labs, perhaps at home, you may like to use the same software that we have available in the labs. This document describes how to install and configure Notepad++ using the same settings available in the labs.

<http://notepad-plus.sourceforge.net>

What is a text editor?

A text editor is a program that enables you to write plain text files (a *text file* is a file that consists of lines of text comprised mainly of the characters that you can type on a keyboard). A common extension for text files is *.txt*, although the Java source files that we are creating in this course are also examples of text files and use the extension *.java*. There are many text editors that are freely available for you to use. For example, Windows provides a very simple text editor called Notepad (that you can find under the *Accessories* menu). However, this is not a very good editor for writing source code because it doesn't support useful features such as syntax-colouring, auto-indentation and brace highlighting. Notepad++ is a freely available text editor for Windows, and is the editor we will be using in the labs to write our Java source code.

Install Java (JDK)

Before installing and configuring Notepad++ make sure that you have installed the Java Development Kit (JDK). You can download and install the most recent version from:

<http://java.sun.com/javase/downloads/index.jsp>

Make sure you are able to compile and run programs using the Command Prompt **before** you install and configure Notepad++.

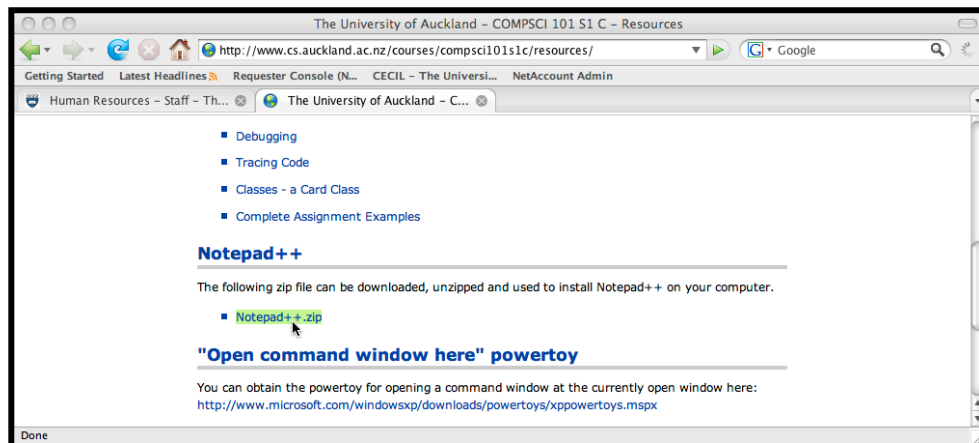


Installing Notepad++

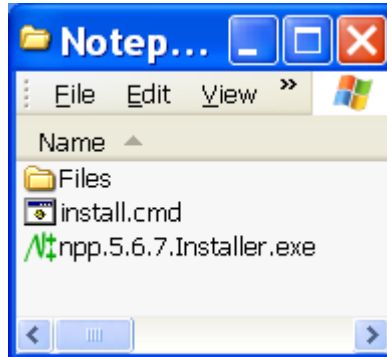
Go to the Resources page of the CompSci 101 website:

<http://www.cs.auckland.ac.nz/courses/compsci101s1c/resources/>

and download the zip file, Notepad++.zip, to your desktop.

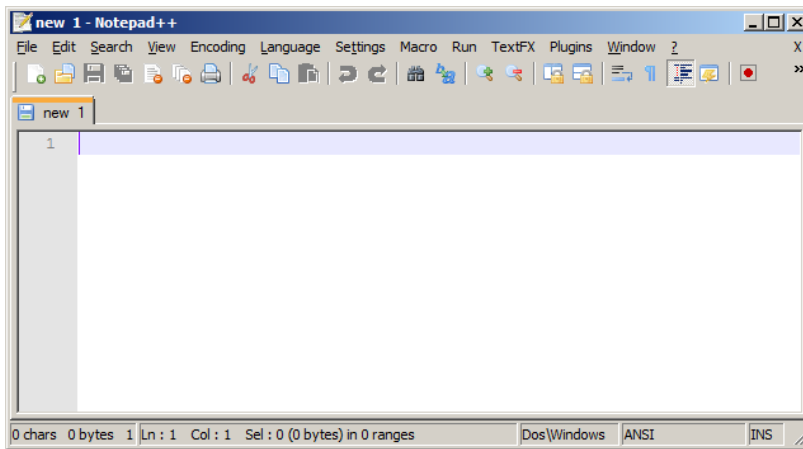


Unzip the file and you should see the following folder on your desktop:



Right-click the installer.exe file and select "run as administrator". Notepad++ will now be installed on your computer.

To check that you have installed Notepad++ correctly, run the application (a  link should appear on your desktop) and you should see an editor window like the following appear:



Configuring Notepad++

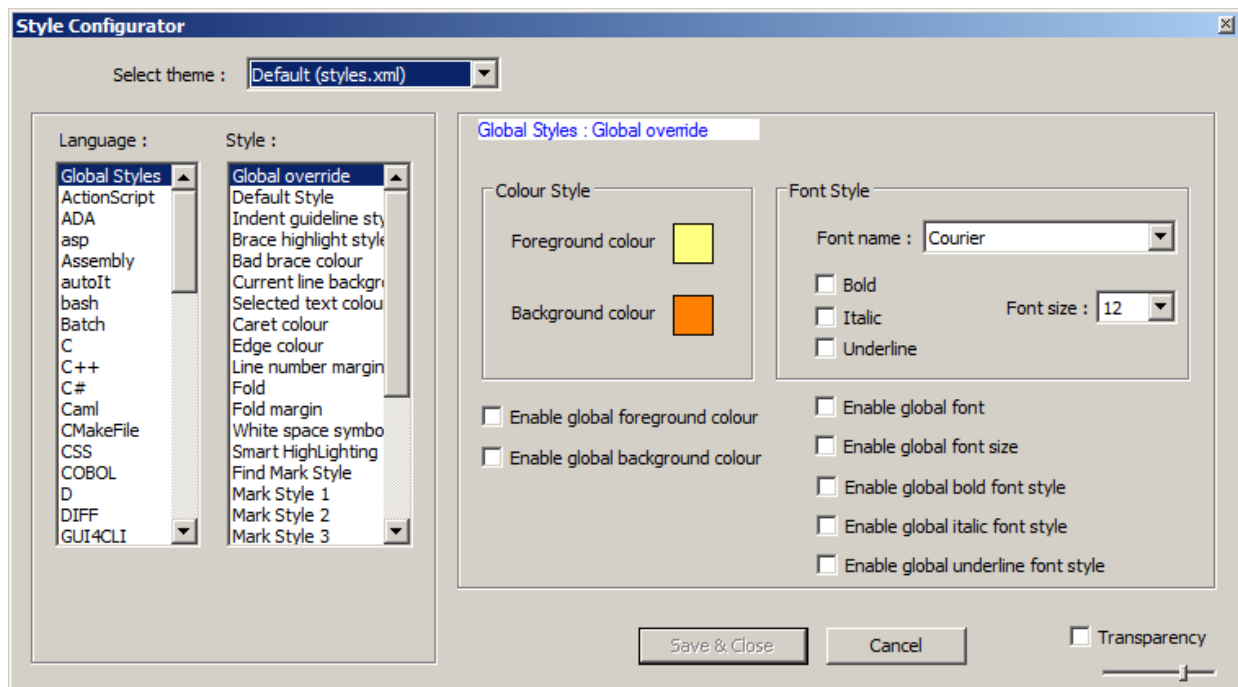
In the labs, certain commands and short-cut keys have been defined to make it easier for you to compile and run your Java applications. This section will describe how to configure Notepad++ so that the same commands and short-cut keys are available to you.

Display Font

If you would like to set the display font to be identical to the settings used in the labs, go to:

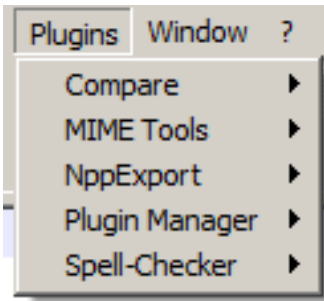
Settings > Style Configurator...

Set Font to Courier, and Font size to 12 for Language: Global Styles and Style: Global override

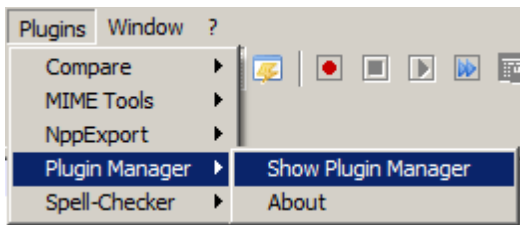


NppExec Plugin

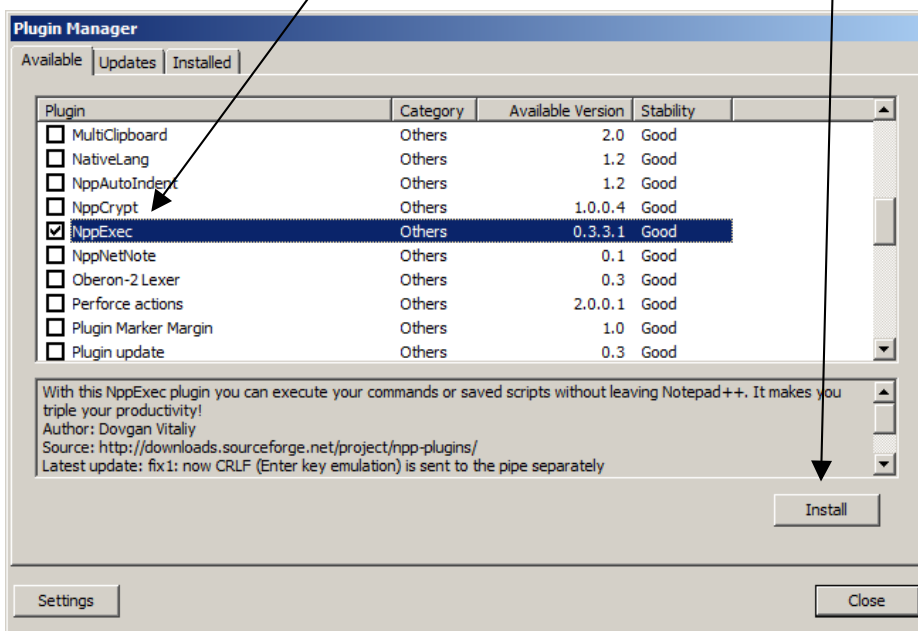
Open the *Plugins* menu. You will need an option called **NppExec** in this menu and it may not be present by default (as in the example screenshot below):



If the NppExec plugin is *not* present, you can enable it by going to *Plugin Manager* and selecting *Show Plugin Manager*:



From here, find the NppExec plugin, and select it – then click Install:



You will be prompted to restart Notepad++. Click Yes and wait for Notepad++ to restart.

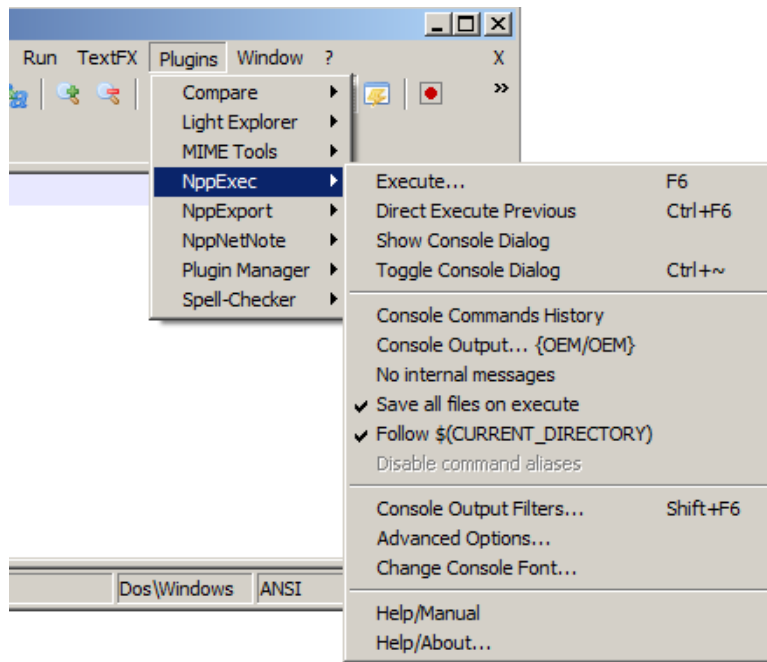
You should now see NppExec appearing on the Plugins menu:

Configure the NppExec Plugin:

Go to Plugins > NppExec and apply the followings

1. Disable "Console Command History"
2. Enable "Save all files on execute"
3. Enable "Follow \${CURRENT_DIRECTORY}"

as shown in the screenshot below:



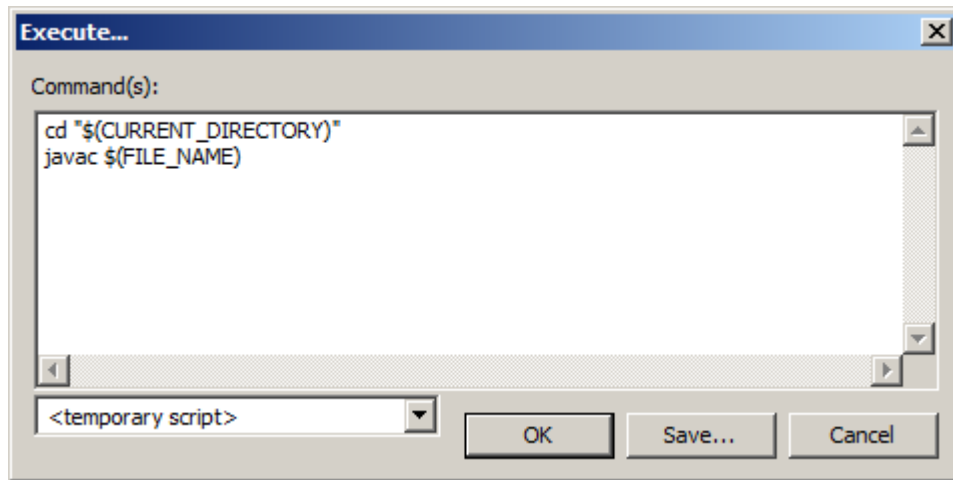
Short-cut keys

Define functions and corresponding short-cut keys for compiling and running Java programs:

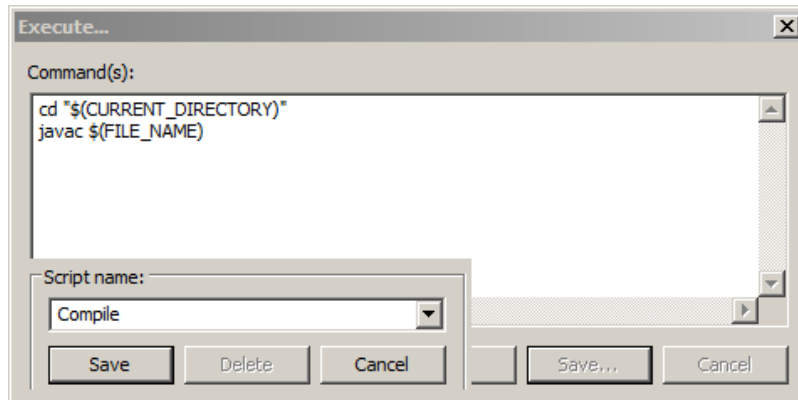
1. Go to Plugins > NppExec > Execute...
2. Choose "Cancel" if a Save File... dialog box appears
3. Enter the following command:

```
cd "${CURRENT_DIRECTORY}"  
javac ${FILE_NAME}
```

as shown below:



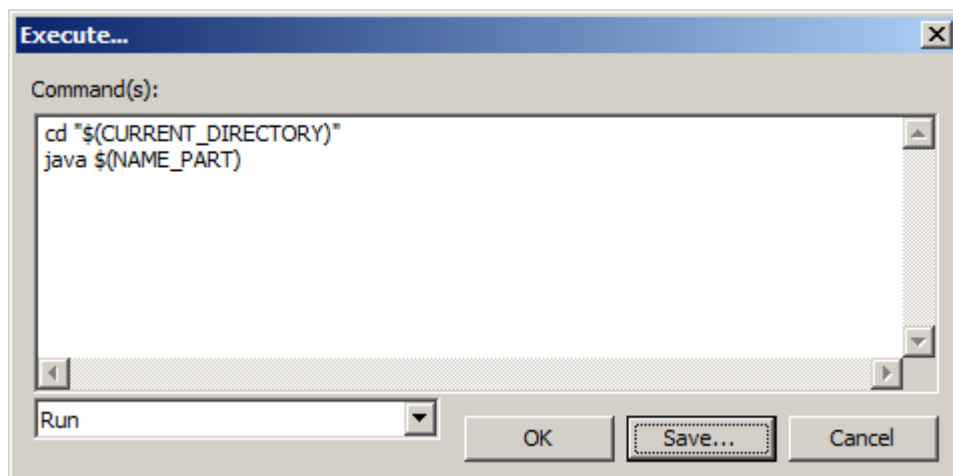
Then choose Save... and save this using the name "Compile":



4. Save two more commands:

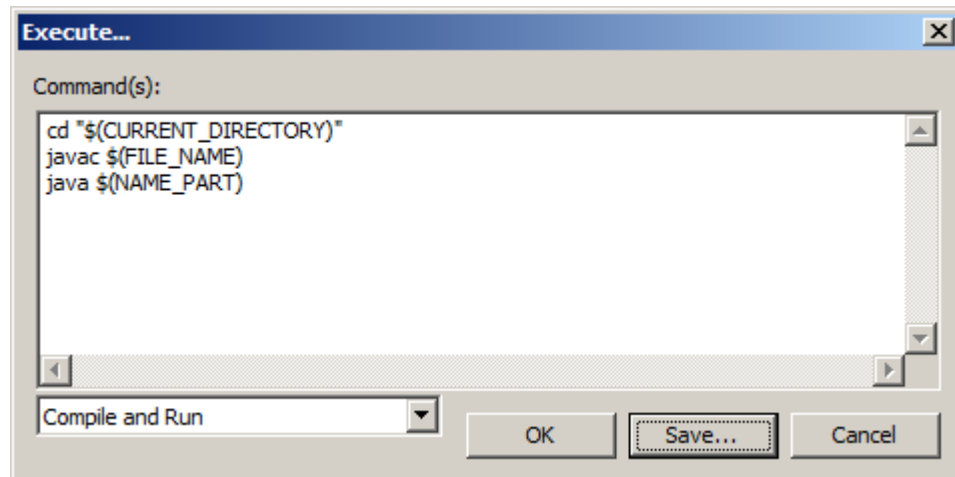
One called "Run":

```
cd "$(CURRENT_DIRECTORY)"  
java $(NAME_PART)
```



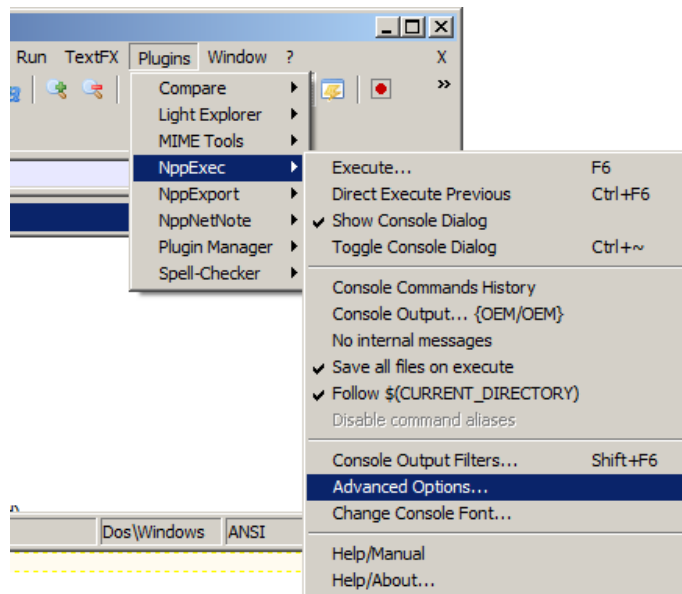
and another called "Compile and Run"

```
cd ${CURRENT_DIRECTORY}
javac ${FILE_NAME}
java ${NAME_PART}
```

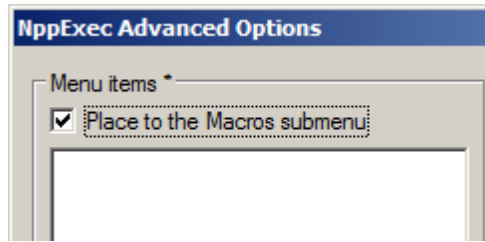


5. Define the scripts for the short-cut keys:

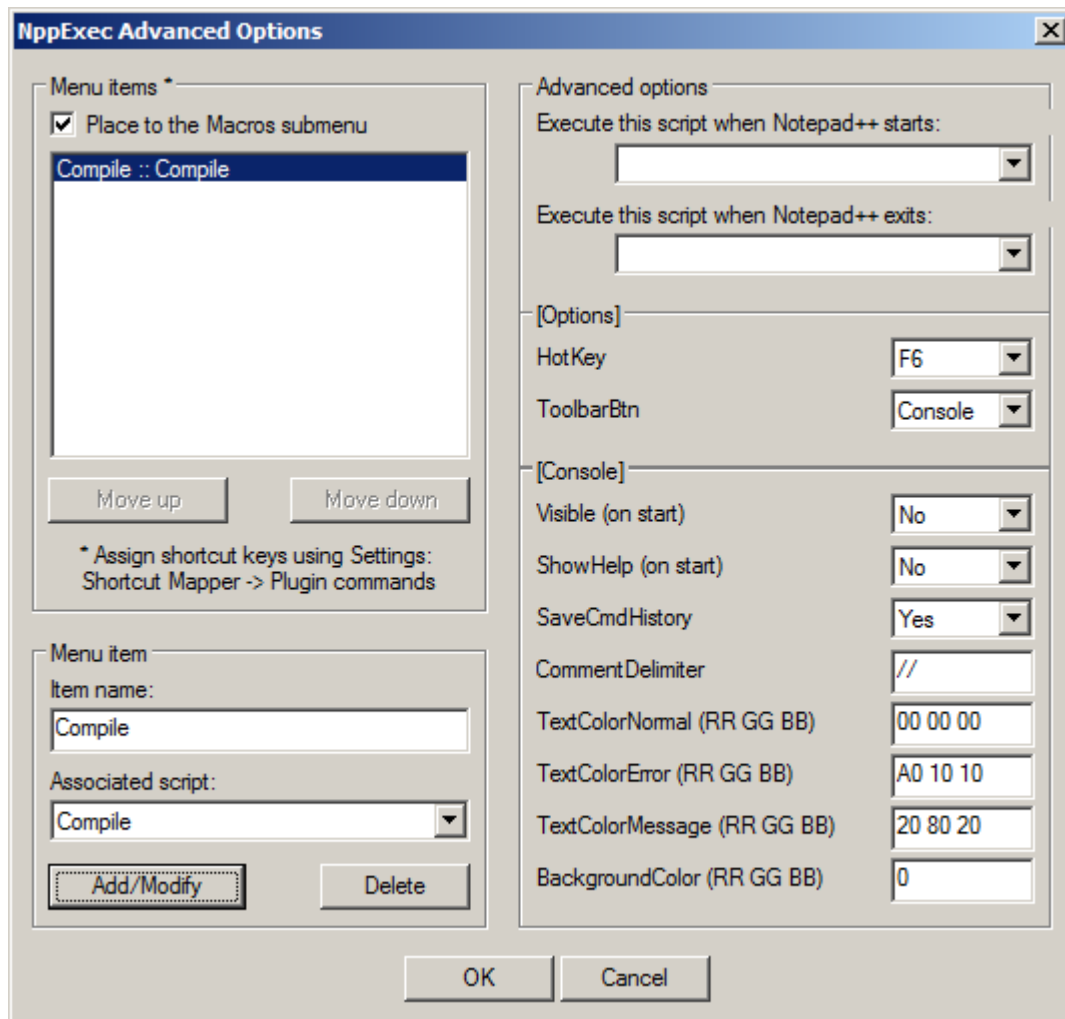
Go to NppExec Advance Options



and enable "Place to the Macros submenu".



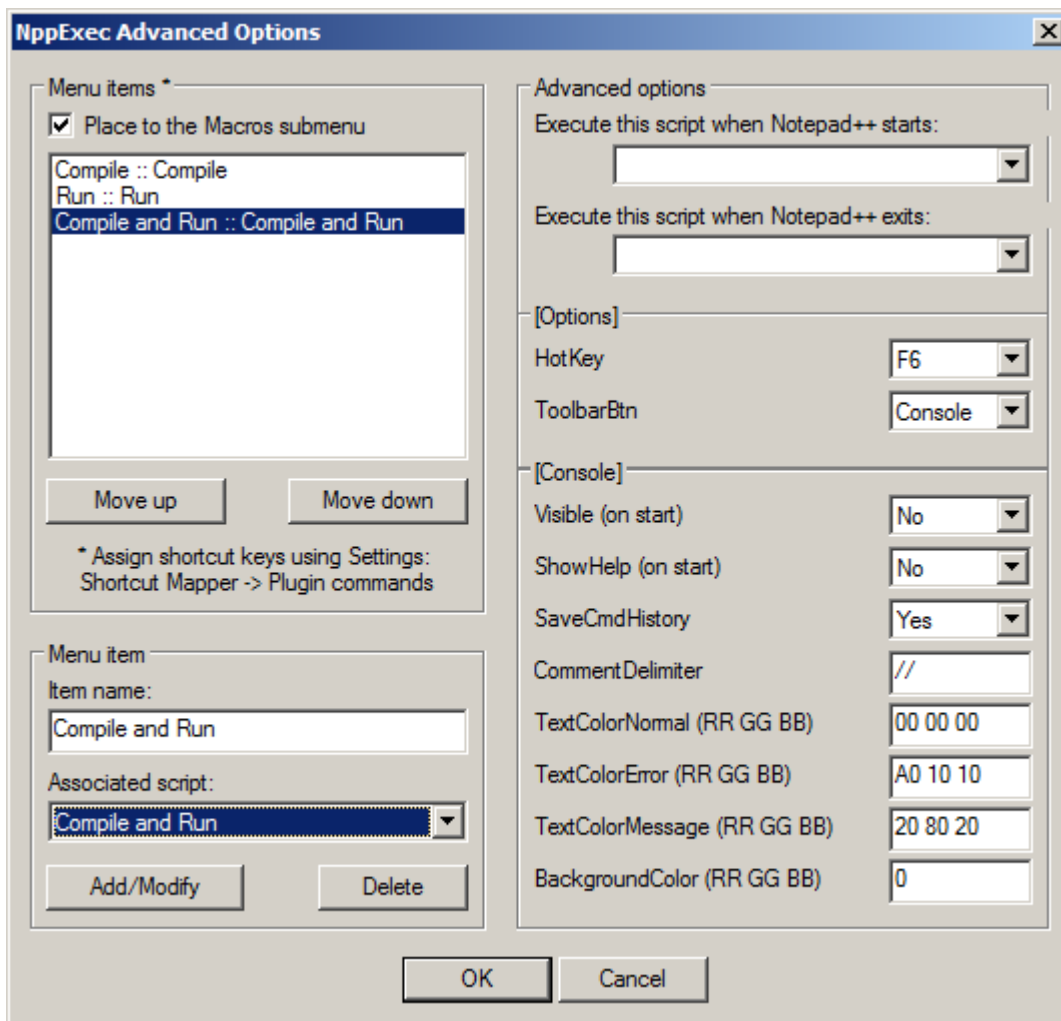
Then select “Compile” from under the “Associated script:” menu, and click the “Add/Modify” button:



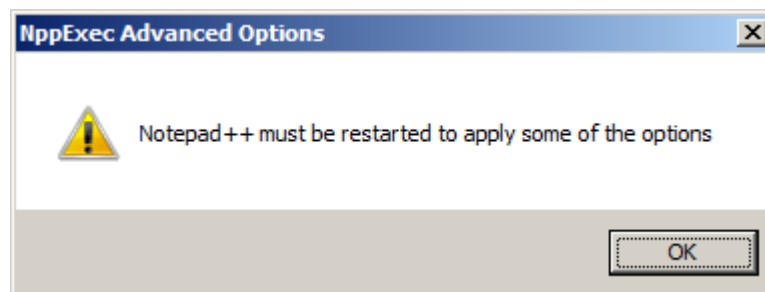
You should see the script added in the “Menu items” box as shown above.

Repeat this process for the other two scripts, be careful to type the names “Run” and “Compile and Run” in the “Item name:” box before hitting the Add/Modify button.

The screenshot below shows what this should look like when you have added all three scripts:



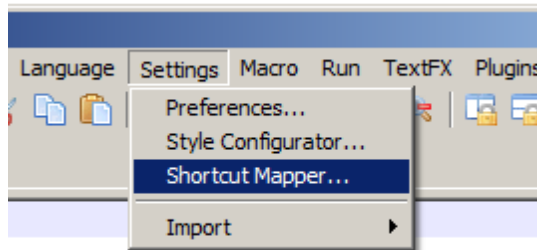
Select OK – you will be shown a dialog box indicating the Notepad++ needs to restart.



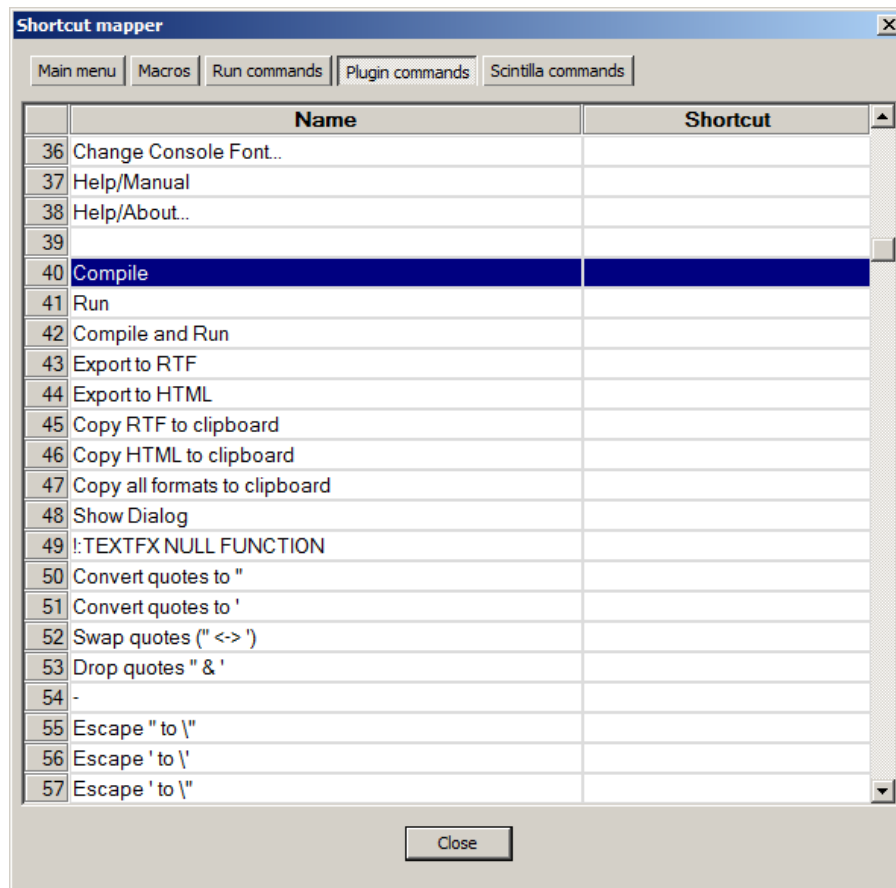
Select OK, and close Notepad++, then open it again.

6. Finally, set up the short-cut key mappings:

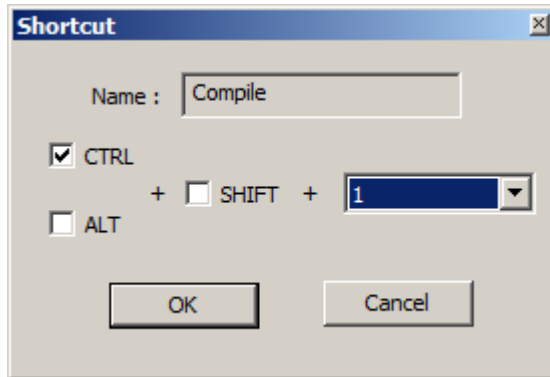
Go to Setting > Shortcut mapper:



and select the “Plugin commands” tab. Scroll down to find the scripts you defined:

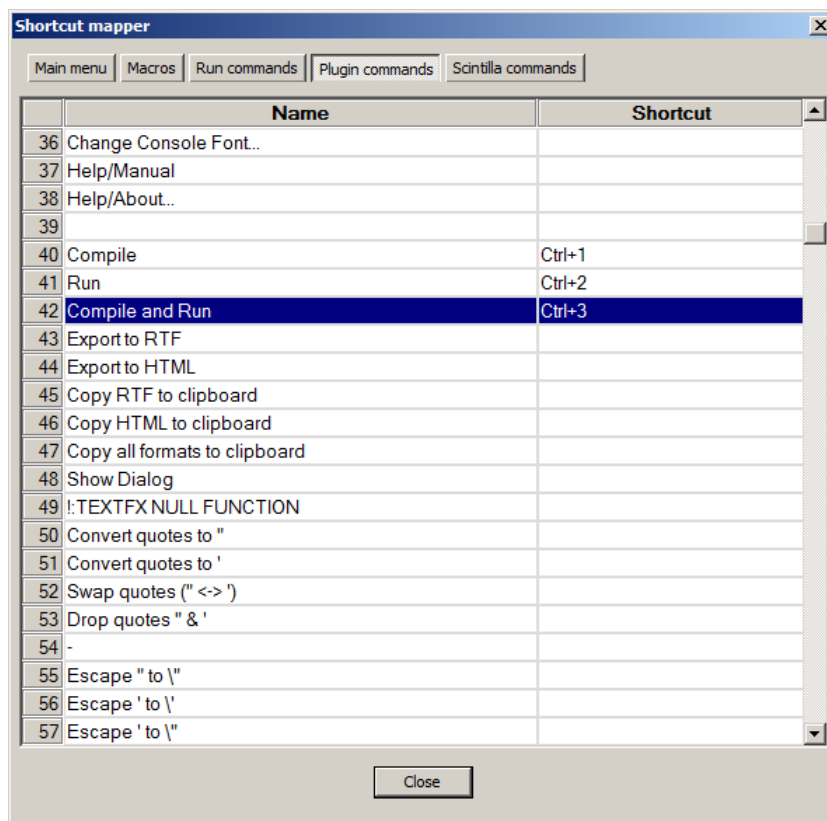


Double-click the “Compile” script name to bring up the “Shortcut” box. In this box, you can enter the desired short cut for the “Compile” script. Enter CTRL+1 as shown below:



Repeat this for the other two scripts so that you have defined:

Compile:	Ctrl + 1
Run:	Ctrl + 2
Compile and Run:	Ctrl + 3



and then click the “Close” button

Output Font

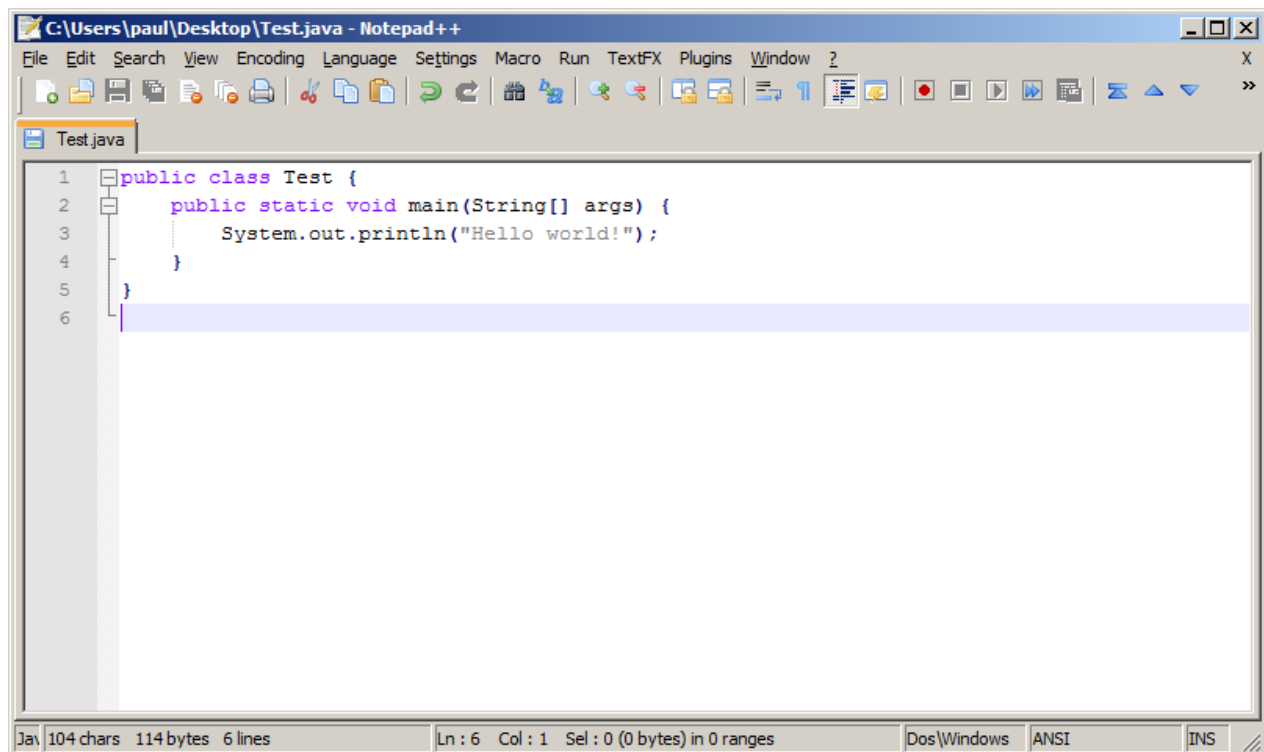
To set the font for the output window, go to Plugins > NppExec > Change Console Font, and set to Courier font, and Font size to 12

Testing the configuration of Notepad++

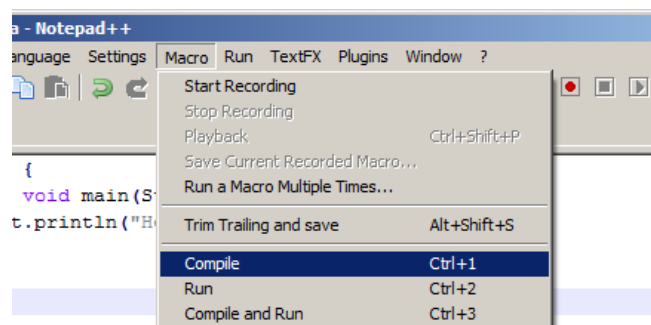
To test that the Notepad++ has been configured correctly, enter the following source code into the editor:

```
public class Test {  
    public static void main(String[] args) {  
        System.out.println("Hello world!");  
    }  
}
```

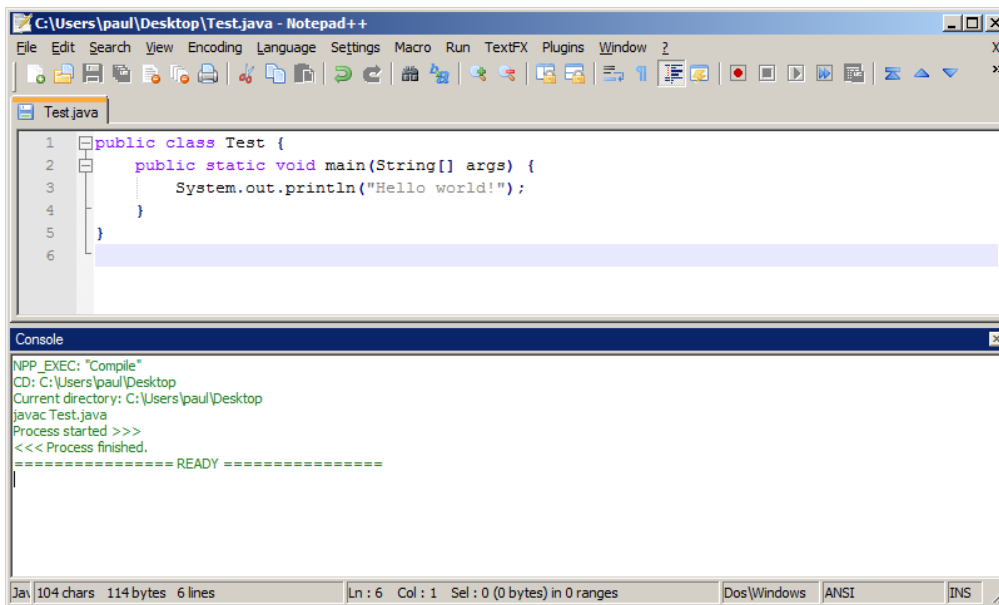
and save the file in some location on your disk:



You should now be able to use the short-cut keys (or you can select them from the “Macro” menu) to compile and run your program:



You should see the console pane appear with output from the compiler:



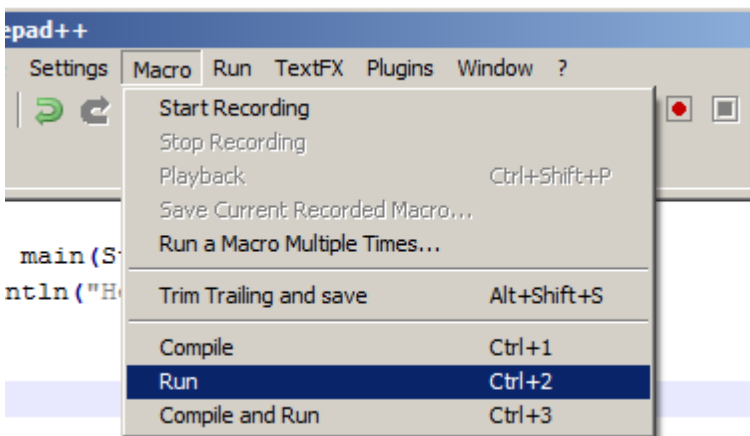
The screenshot shows the Notepad++ application window with the file `C:\Users\paul\Desktop\Test.java` open. The code in the editor is:

```
1 public class Test {  
2     public static void main(String[] args) {  
3         System.out.println("Hello world!");  
4     }  
5 }  
6
```

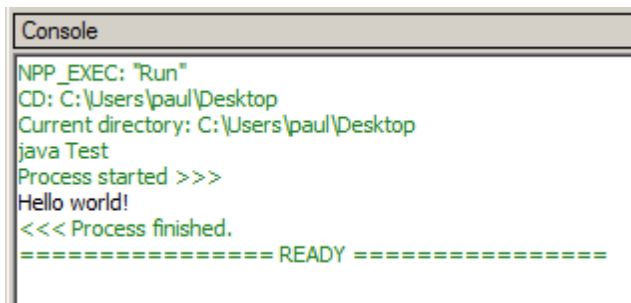
The console pane at the bottom displays the output of the compilation process:

```
NPP_EXEC: "Compile"  
CD: C:\Users\paul\Desktop  
Current directory: C:\Users\paul\Desktop  
javac Test.java  
Process started >>>  
<<< Process finished.  
===== READY =====
```

You can then run the program:



and you should see the output appear in the console window:



The screenshot shows the console window in Notepad++ displaying the output of running the program:

```
NPP_EXEC: "Run"  
CD: C:\Users\paul\Desktop  
Current directory: C:\Users\paul\Desktop  
java Test  
Process started >>>  
Hello world!  
<<< Process finished.  
===== READY =====
```