

Appendix A Using the Java Compiler

1. Download the Java Development Kit from Sun:
 - a. Go to <http://java.sun.com/j2se/1.4.2/download.html>
 - b. Download J2SE v1.4.2 (click the SDK column)

Download J2SE v 1.4.2

JRE

Windows Installation ([info](#))

[DOWNLOAD](#)

2. Install Java. Simply follow the prompts. Java will be installed in a folder called jdk.1.4.2 (or possibly sdk1.4.2 or some variation of that) on your c: drive. **Make sure you know the name of the directory where Java has been installed.**
3. You should set the PATH variable in your system. Setting the PATH variable is not necessary but doing so will allow you to invoke the java compiler from any directory without using the entire pathname. Thus, you will be able to call the java compiler with the simple command

javac

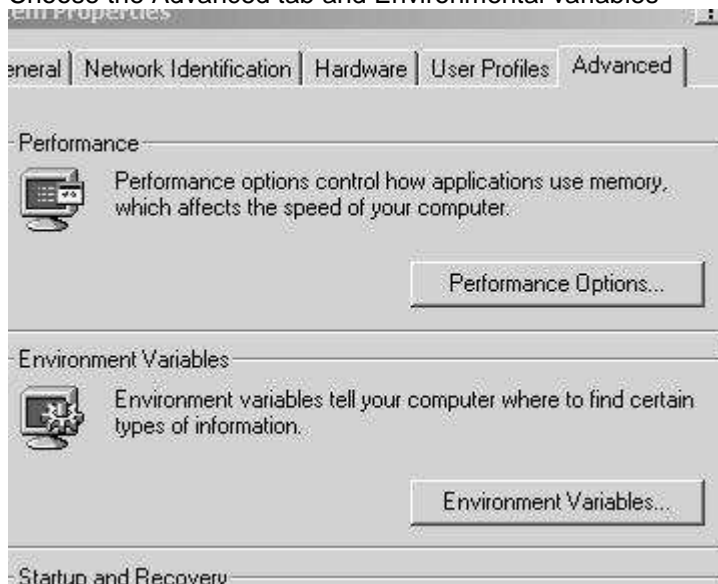
rather than

c:/jdk1.4.2/bin/javac

(Actually, Textpad makes it even easier)

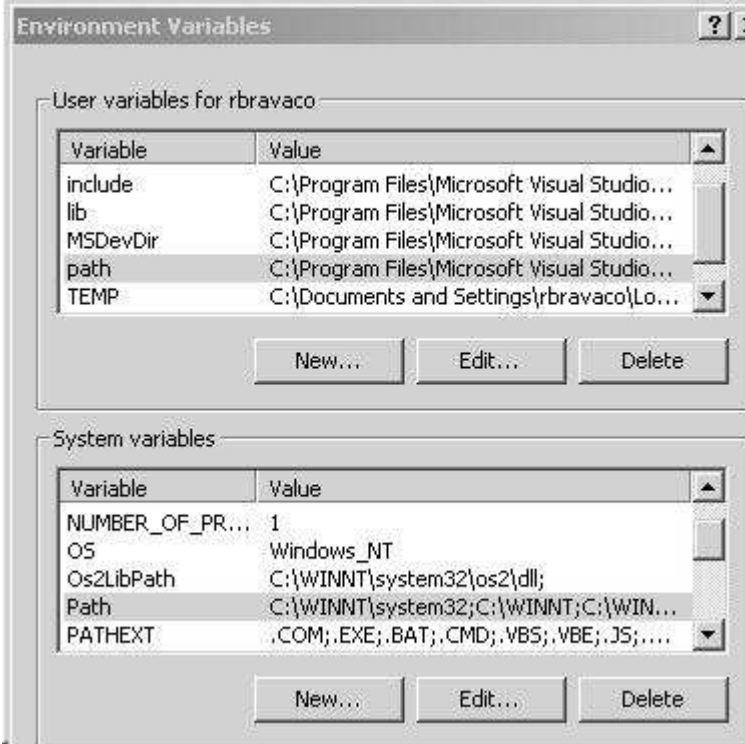
In Windows 2000 or XP

- Go to the Start Menu
- Choose Settings -->Control Panel -->System
- Choose the Advanced tab and Environmental variables

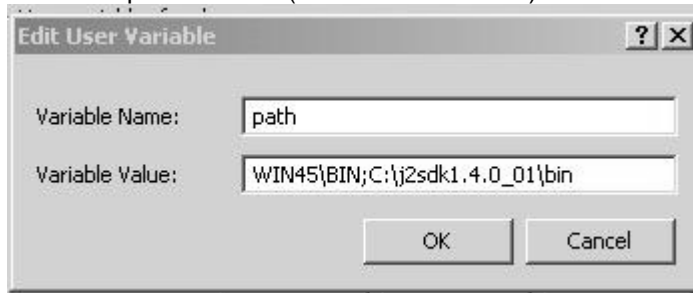


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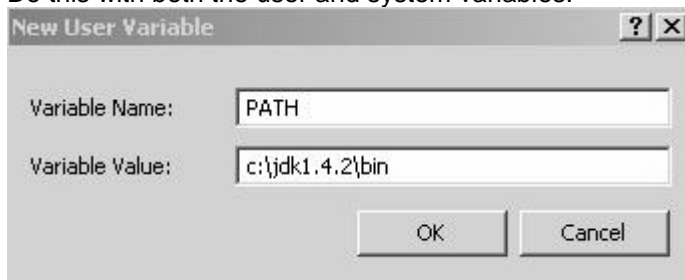
- Find PATH in the user variables and the system variables
(See below if no PATH variable exists)



- For each of these PATH variables, click on Edit and then add `;c:\jdk1.4.2\bin` to the end of current path variable (note the semi-colon)



- Click OK and close the windows
- If no PATH variable exists. Click New instead of Edit and add the new PATH variable. Do this with both the user and system variables.



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In Windows 95/98:

- Go to the Start menu
- Select Run and enter *sysedit*
- Open autoexec.bat
 - Look for the path statement (assuming java was installed in jdk1.4.2)
 - If you have no path statement add the line: *set path= c:\jdk1.4.2\bin*
 - If you have a path statement then add *; c:\jdk1.4.2\bin* to the end of the statement.

The CLASSPATH

You will need to know a little Java before you understand the role of the CLASSPATH. Nonetheless, setting the CLASSPATH will also make compiling a little more convenient.

1. Assume that all of your Java programs will be kept in a root folder called *c:\JavaP* (or whatever name you choose). Before setting the CLASSPATH create this folder.
2. Now follow the same instructions as with the PATH variable using CLASSPATH instead of PATH and **.;c:\JavaP** instead of *c:\jdk1.4.2\bin*. Notice that the class path begins with a period.

Reboot your computer for the changes to take effect.

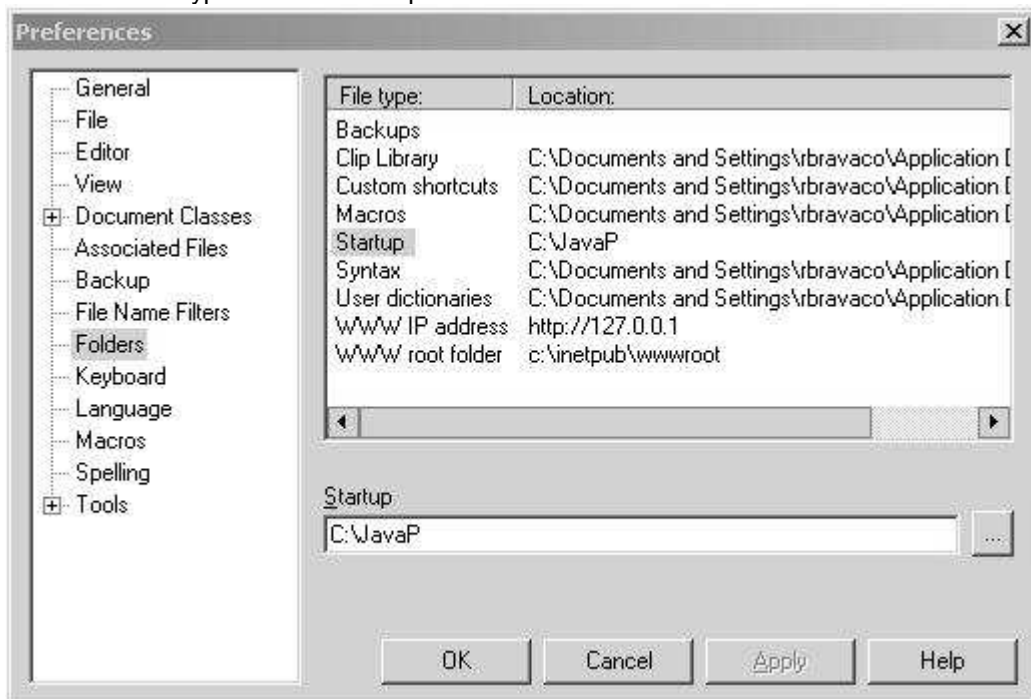
Textpad

We will be using Textpad to create, edit and run programs.

You can download a trial version of Textpad at www.textpad.com

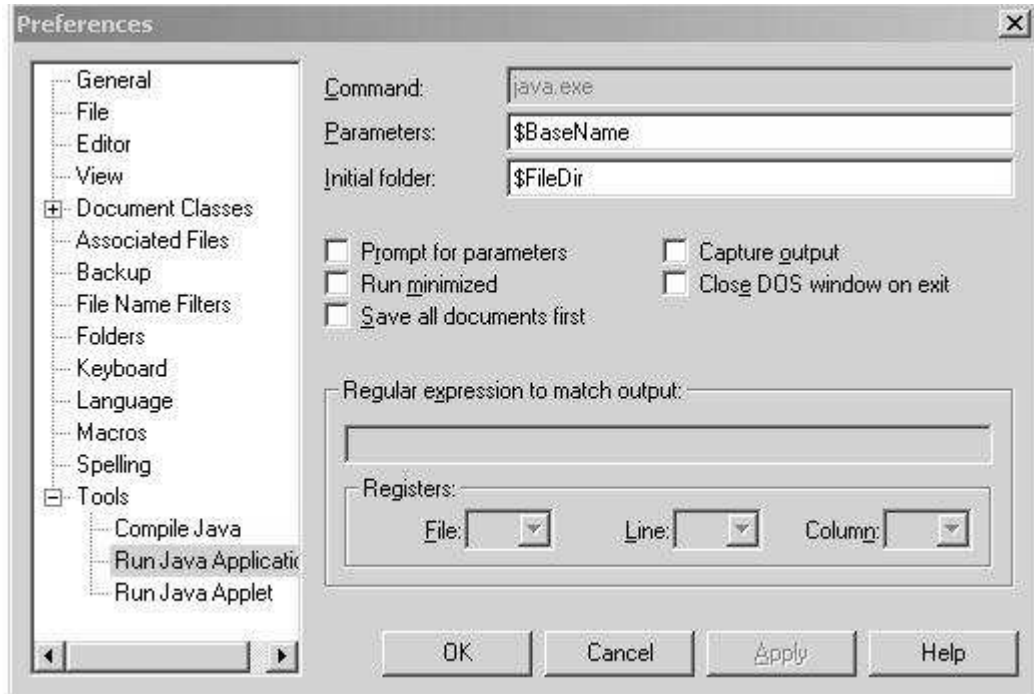
After installing textpad, you can configure it so that whenever Textpad starts up the startup directory is *c:\JavaP* (or wherever you keep your Java programs). To do this

- Open Textpad and from the menu bar choose Configure -->Preferences-->Folders Under File type click on Startup and enter *c:\JavaP* in the textbox:



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- Now choose Run Java Application and make sure the Command, Parameters, and Initial Folder boxes are filled in as below:



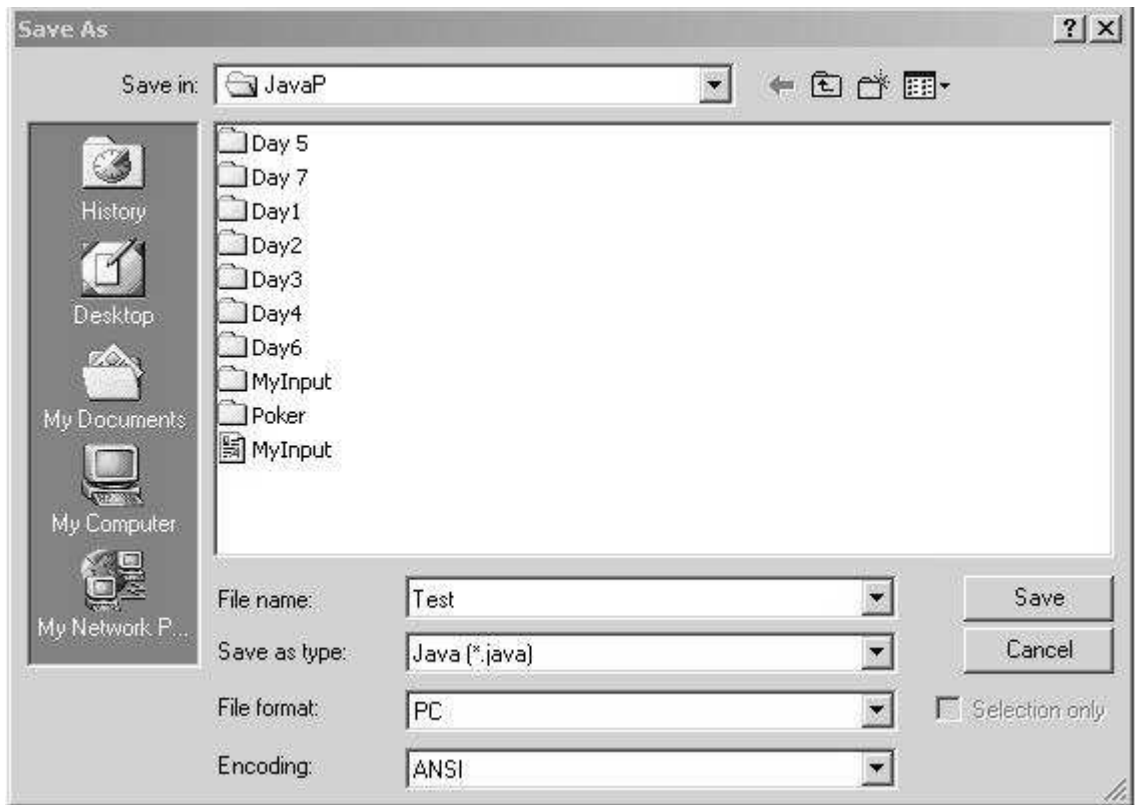
Compiling and running a Java program.

1. Open Textpad (if you do not see a white editing screen choose file-->new)
2. Enter the following program:

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

3. Save your file as Test.java (The file MUST have this name). To do this
 - Choose File-->Save as\
 - Navigate to c:\JavaP (or wherever you want to save the file)
 - Make sure you have chosen *Save as type* : Java (see below)
 - Type the filename without an extension (Textpad will add .java)

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- Click Save

To Compile the program:

1. Make sure Test.java is still open in the edit window.
2. From the menu bar choose Tools --> Compile Java. If you made any syntax errors, Java will tell you what and where they are. To view your program with line numbers, from the menu bar choose view--> line numbers.

To run the program

From the menu bar choose Run Java Application. You should see



Using Notepad instead of Textpad

You can also use Notepad and run your programs from a DOS window. Oddly enough, some programmers prefer this method. To use Notepad (or any text editor):

1. Write your program in Notepad and save your program with a `.java` extension, e.g., `Test.java`. Save the program in the directory `c:\JavaP`. To prevent Notepad from adding a `.txt` extension place the name of your file in quotes e.g., `"Test.java"`
2. Minimize Notepad and open a DOS Window. Navigate to `c:\JavaP`.
3. Compile the program with

```
javac Test.java
```

Notice that you need to type only `javac` and not the entire pathname. This is because we set the `PATH` variable. Otherwise, to invoke the compiler, you would enter the command:

```
c:\jdk1.4.2\bin\javac Test.java
```

4. If there are syntax errors, return to Notepad and fix them.
5. If there are no syntax errors, a file `Test.class` should appear in your directory `c:\JavaP`. This is the executable file. To run the program type

```
java Test
```

Notice there is no extension on the filename (`Test`).