Brooklyn College

Eclipse

Beginner's Guide
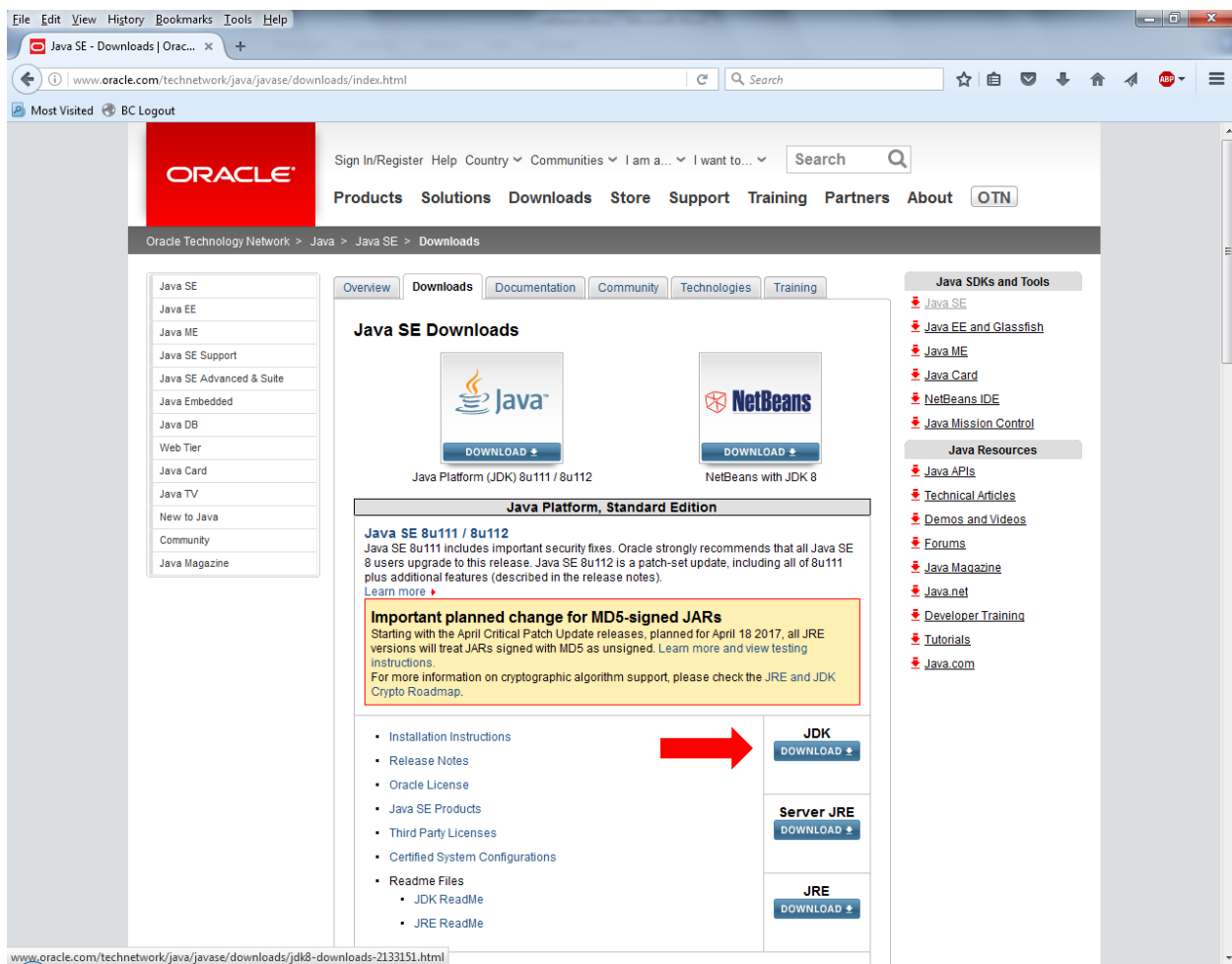
Lawrence Goetz
6/16/2017

Contents

Installation of Java JDK

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The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

See also:
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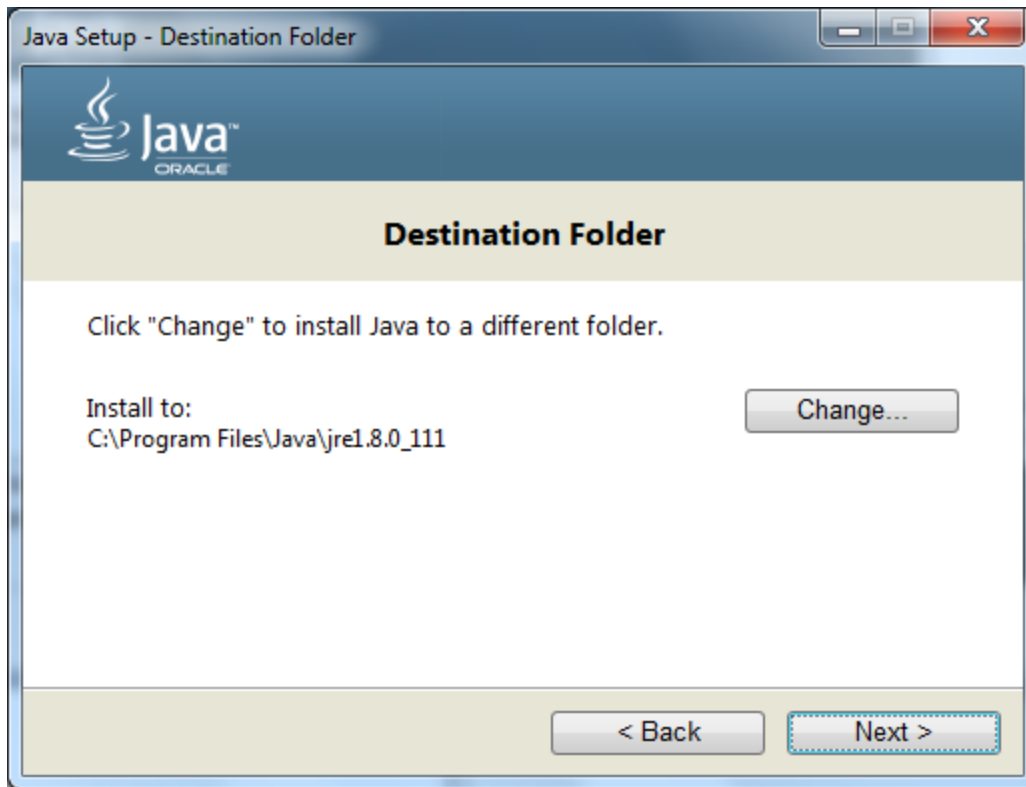
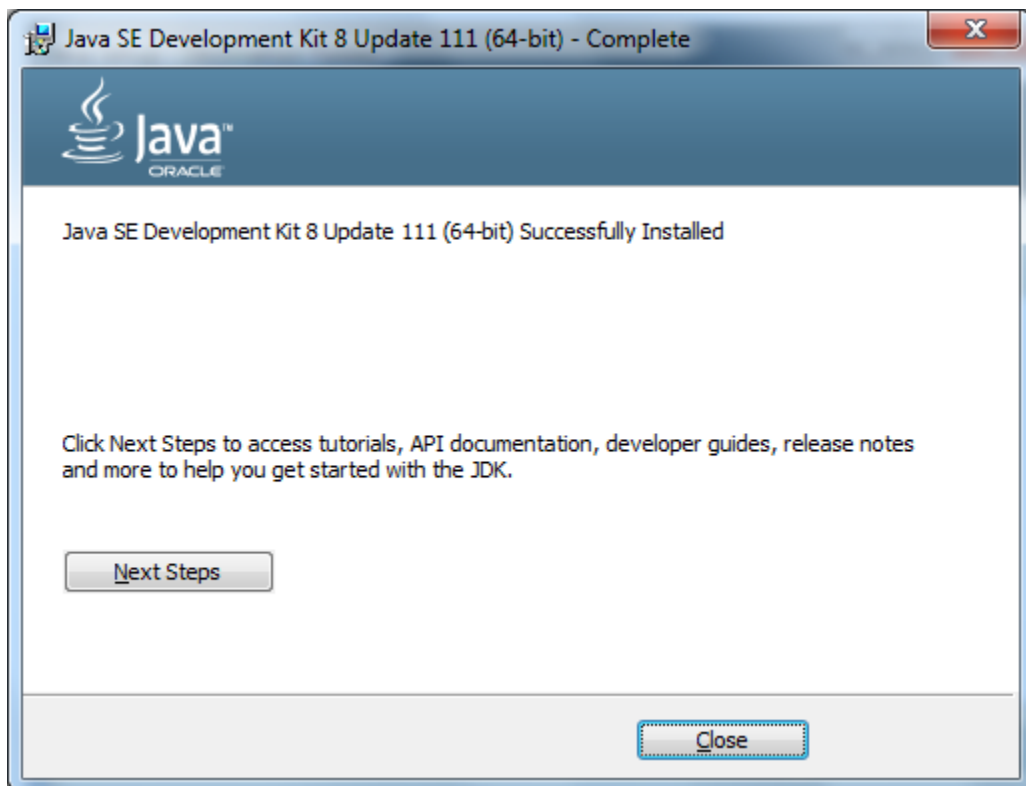When this download is complete, run the program to install the JDK.
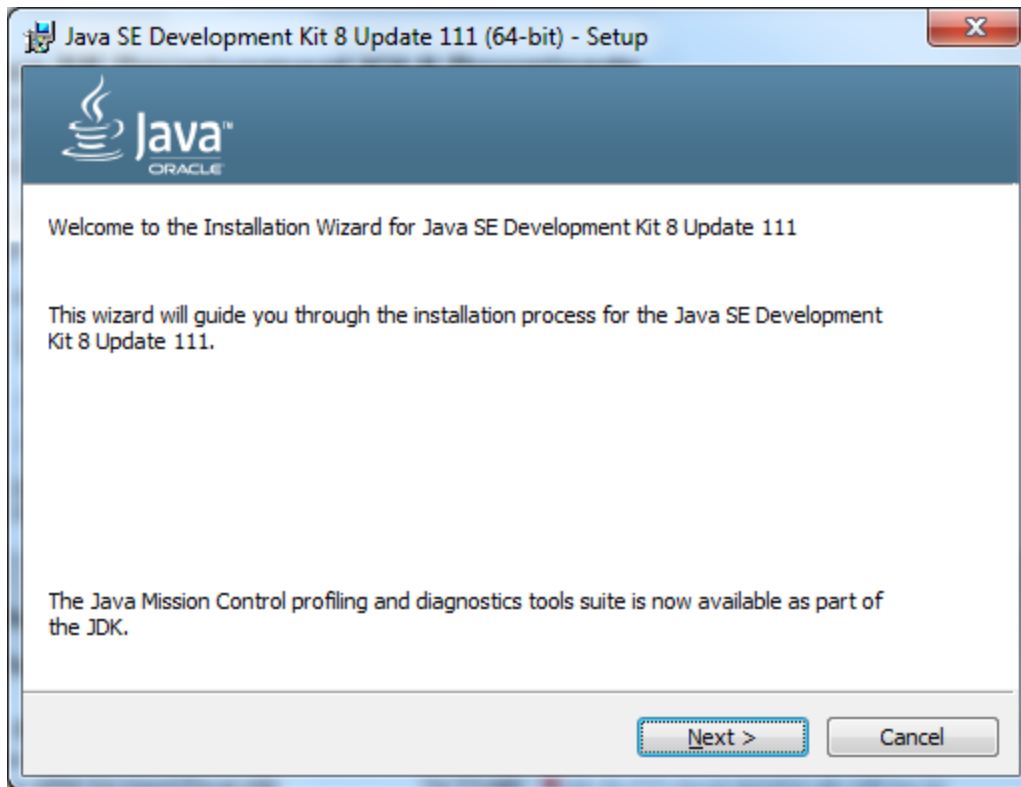
Select **Next**.
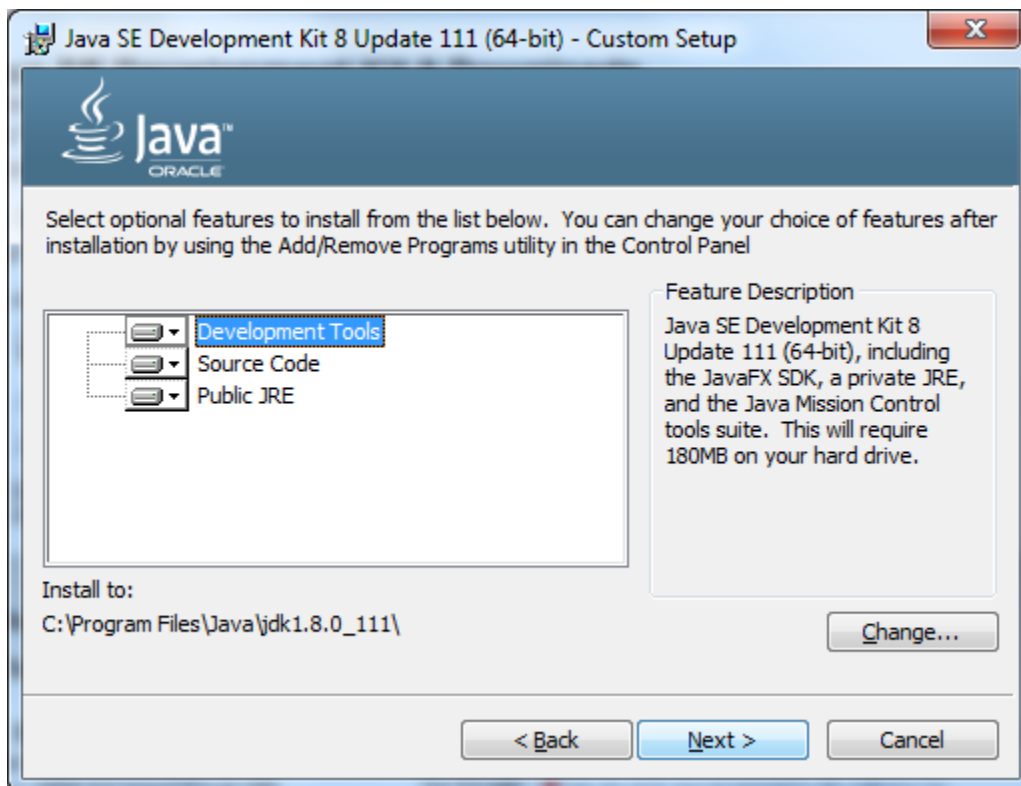
Take the defaults, then select **Next** and the install will begin.
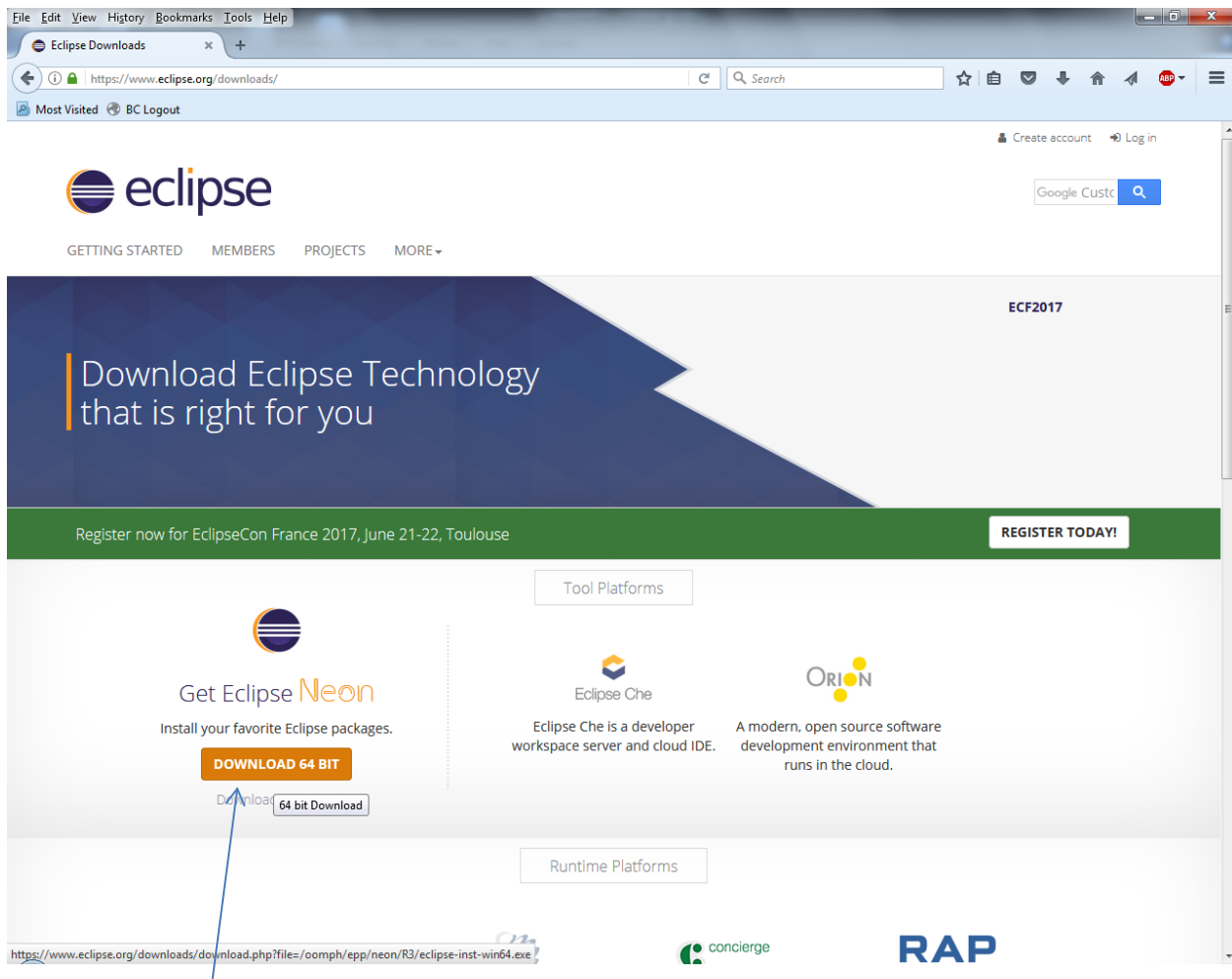
Leave the default values and select **Next**.

Click on **Close**.

Installing Eclipse

Visit:

https://www.eclipse.org/downloads/

Click on the **Download** button. It will show the version for your computer.

Click on the **Download** button to begin the download.
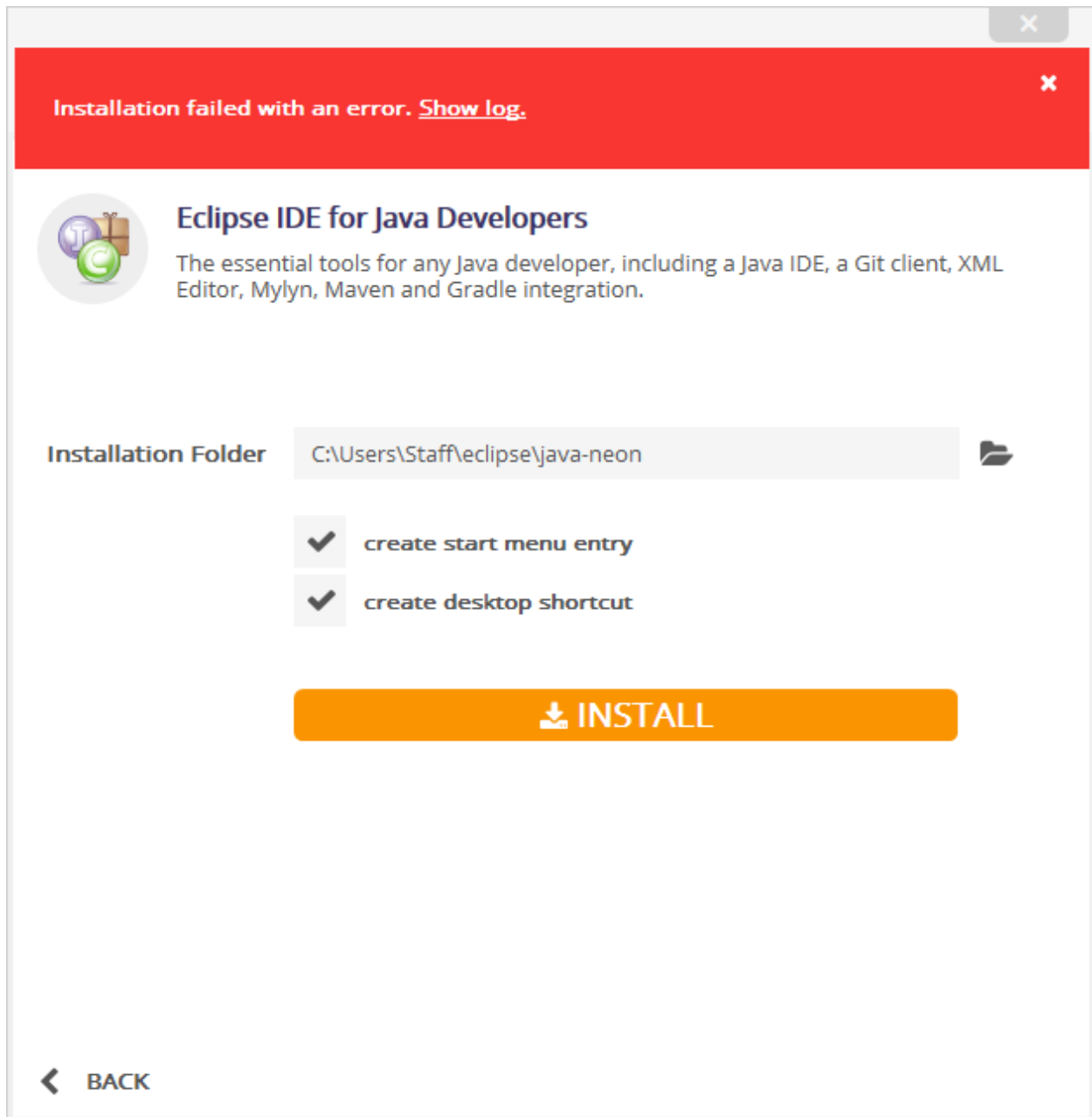
Once the download is complete you can run the installer.
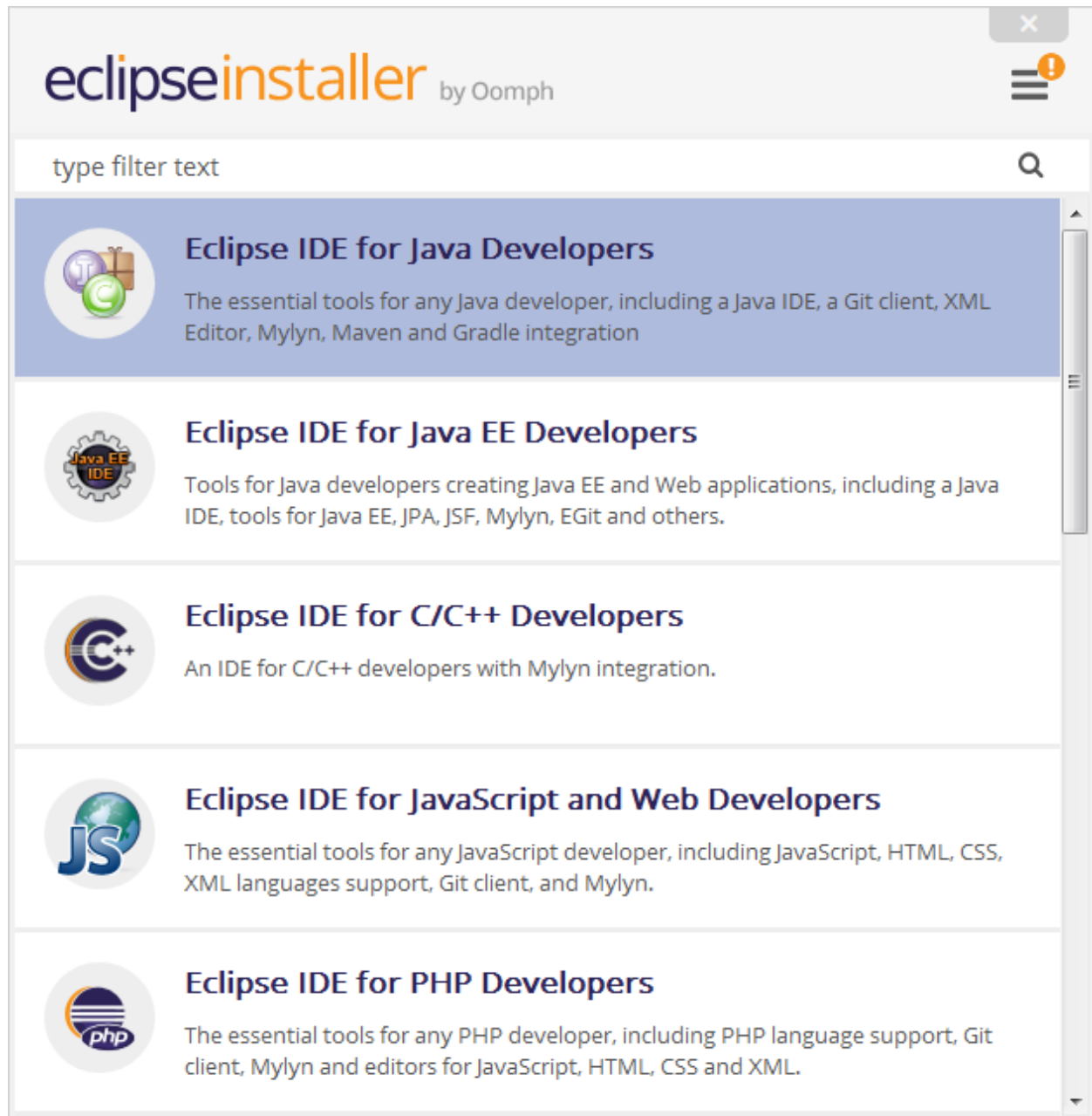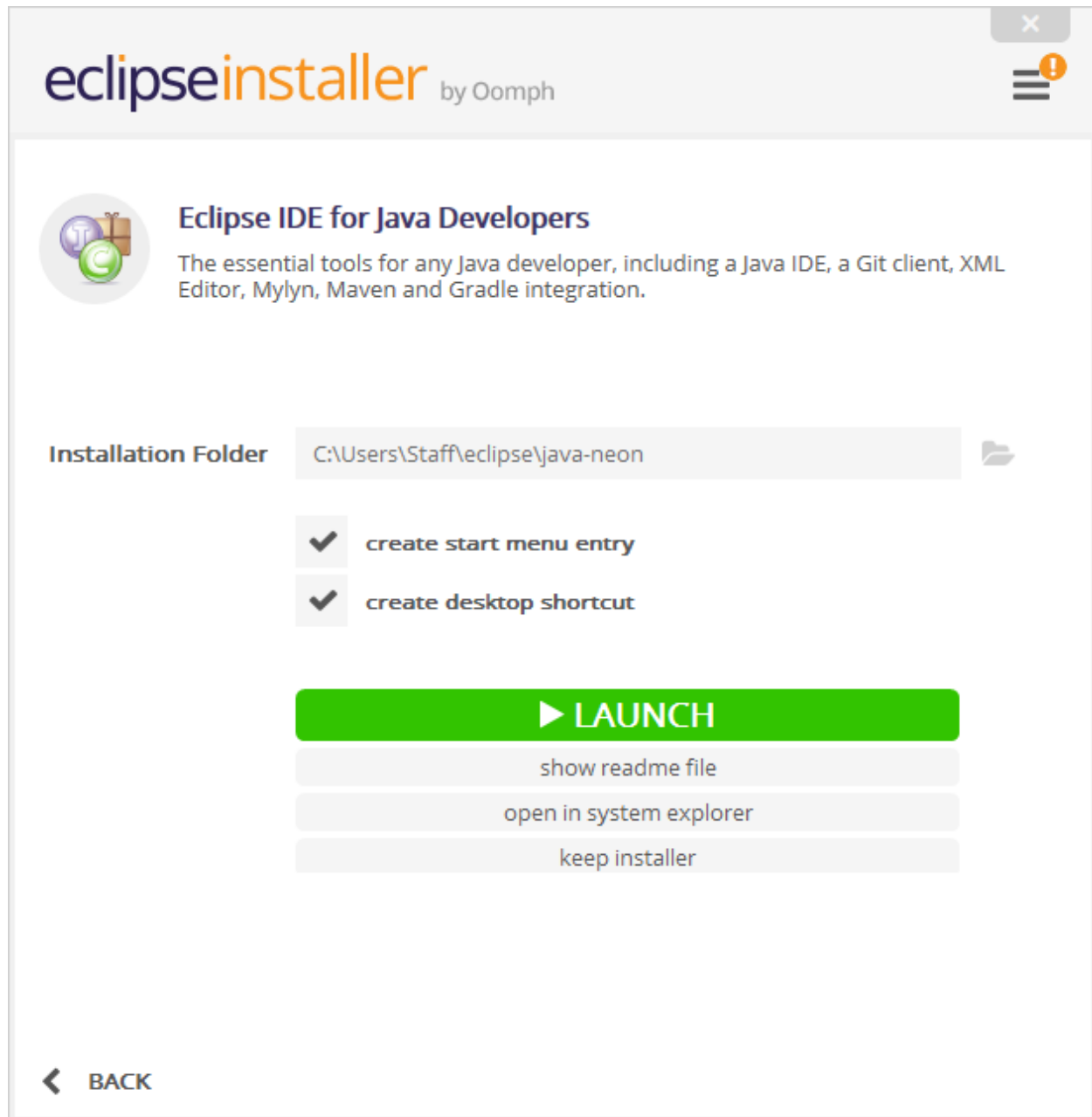
Select the Eclipse IDE for **Java Developers**.
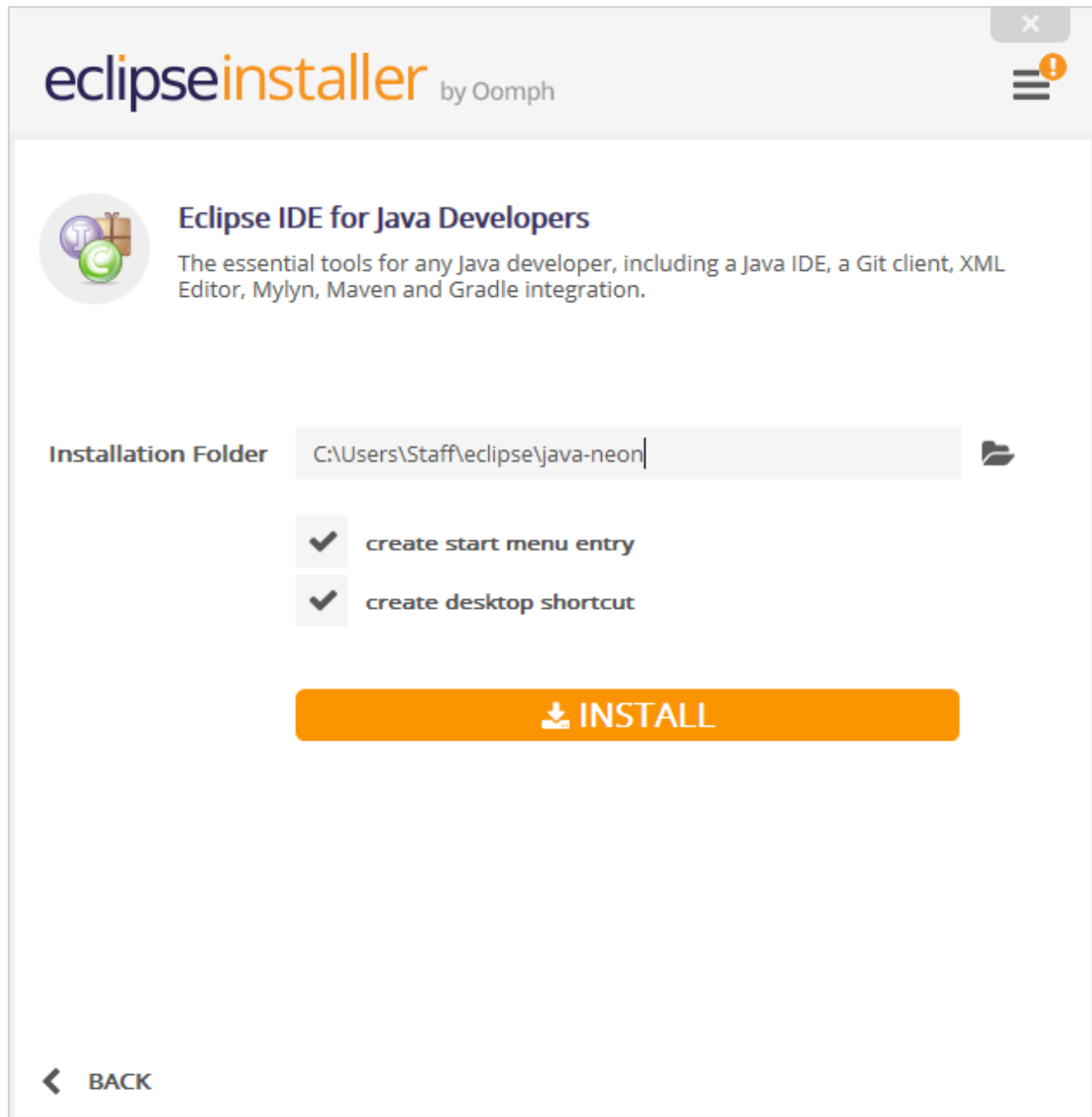
Take the defaults and press **Install**.

Click **Accept Now**.

If you get an error, click on the **Install** button again. Sometimes there will be network errors while getting the installation files. Installation will take a long time and you will see status messages on the top as the files are being downloaded.

Once the install is completed, click on **Launch**.

Running Eclipse

One Eclipse is installed, you can Launch it.

There is also a desktop icon:
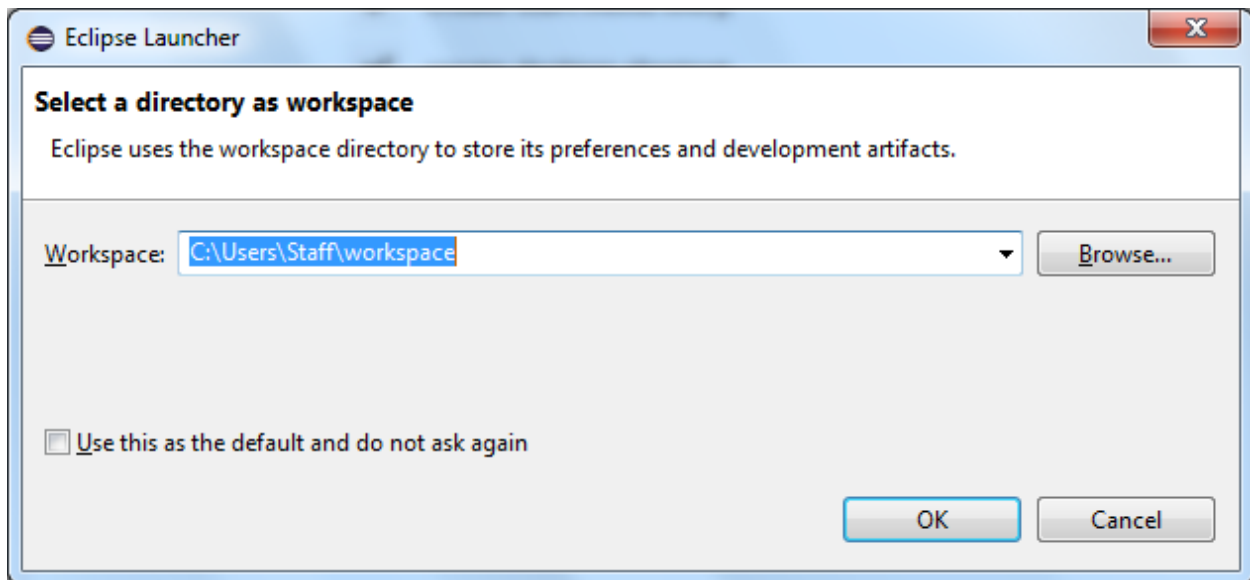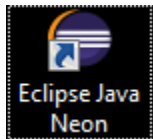
Use the standard Workspace and click on OK.
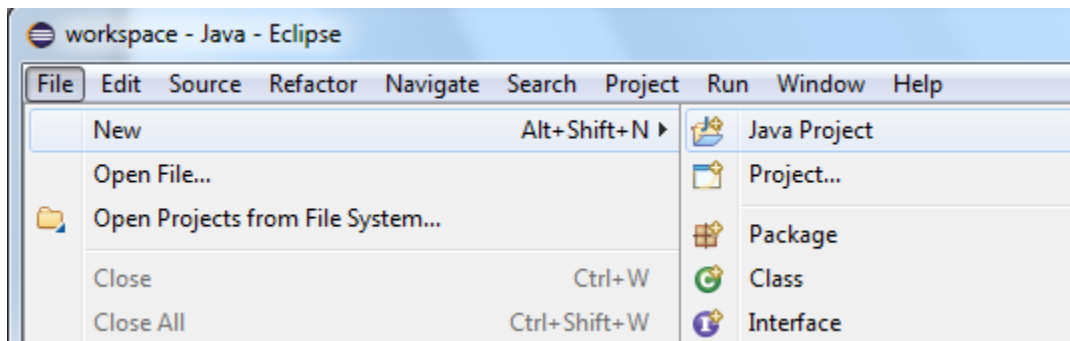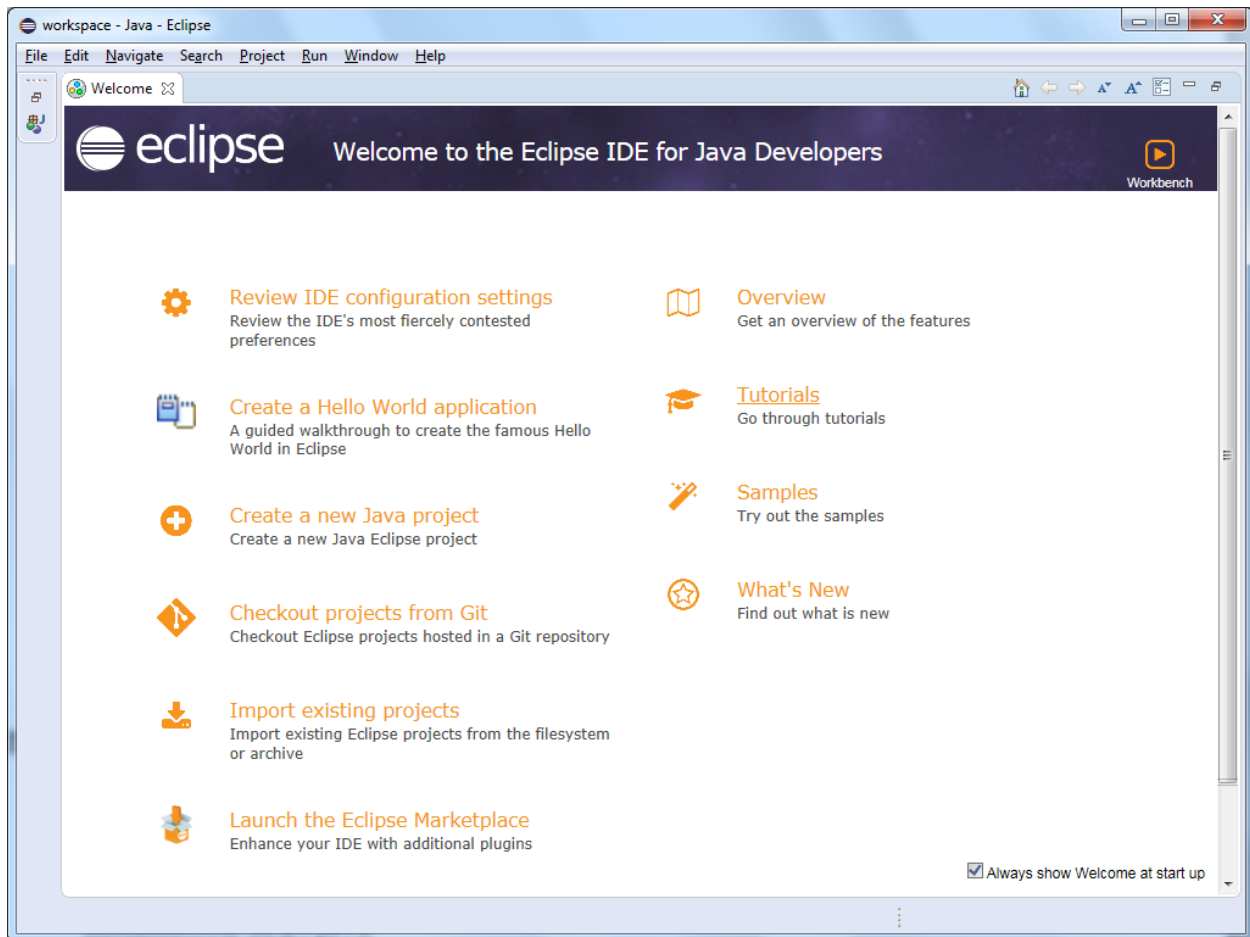
From the **File** menu, select **New**, then select **Java Project**.

Type in the project name as **HelloWorld** and then click on **Finish**.
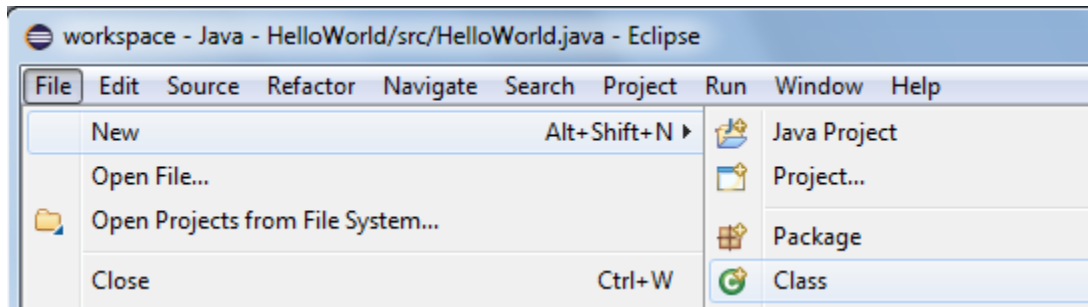
From the **File** menu, select **New**, then select **Class**.
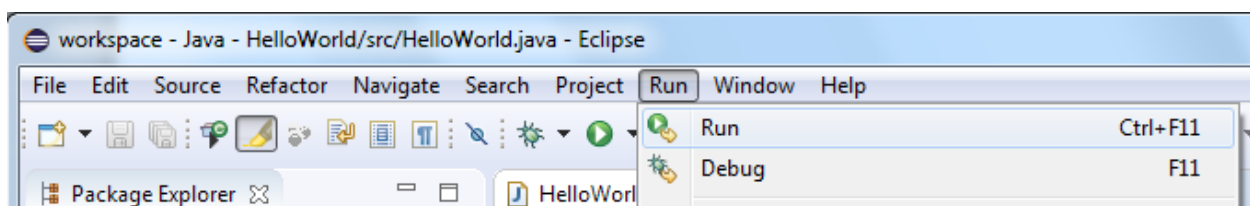
Fill in the **Name** of the class and to check to **create public static void main**.
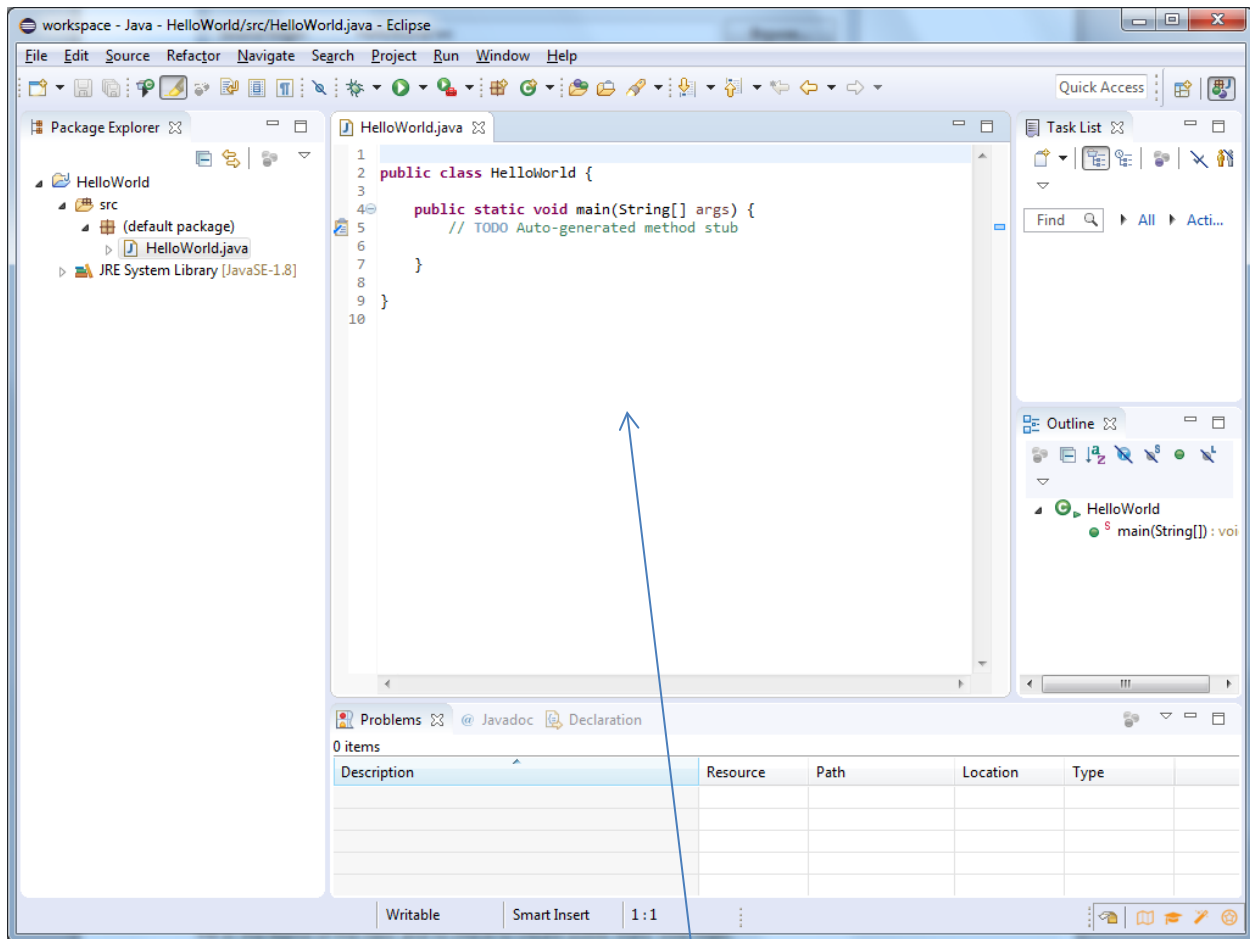
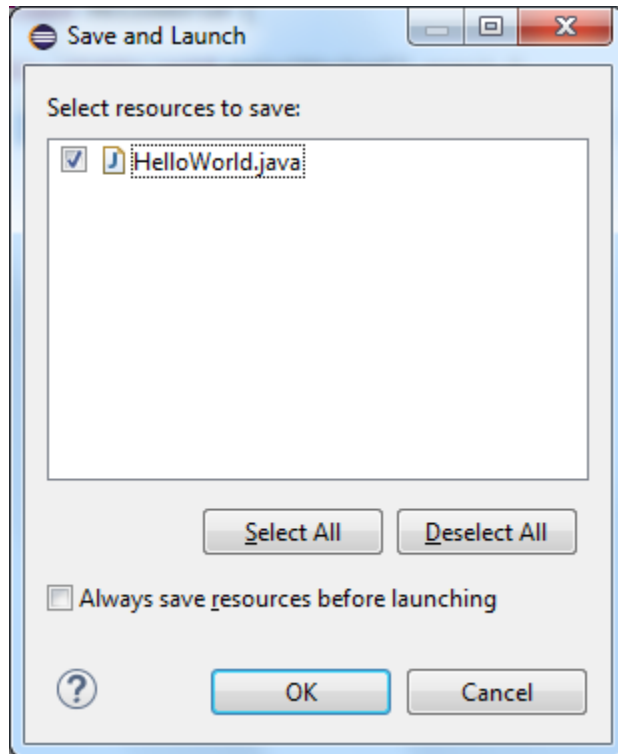Sample class.   Editor
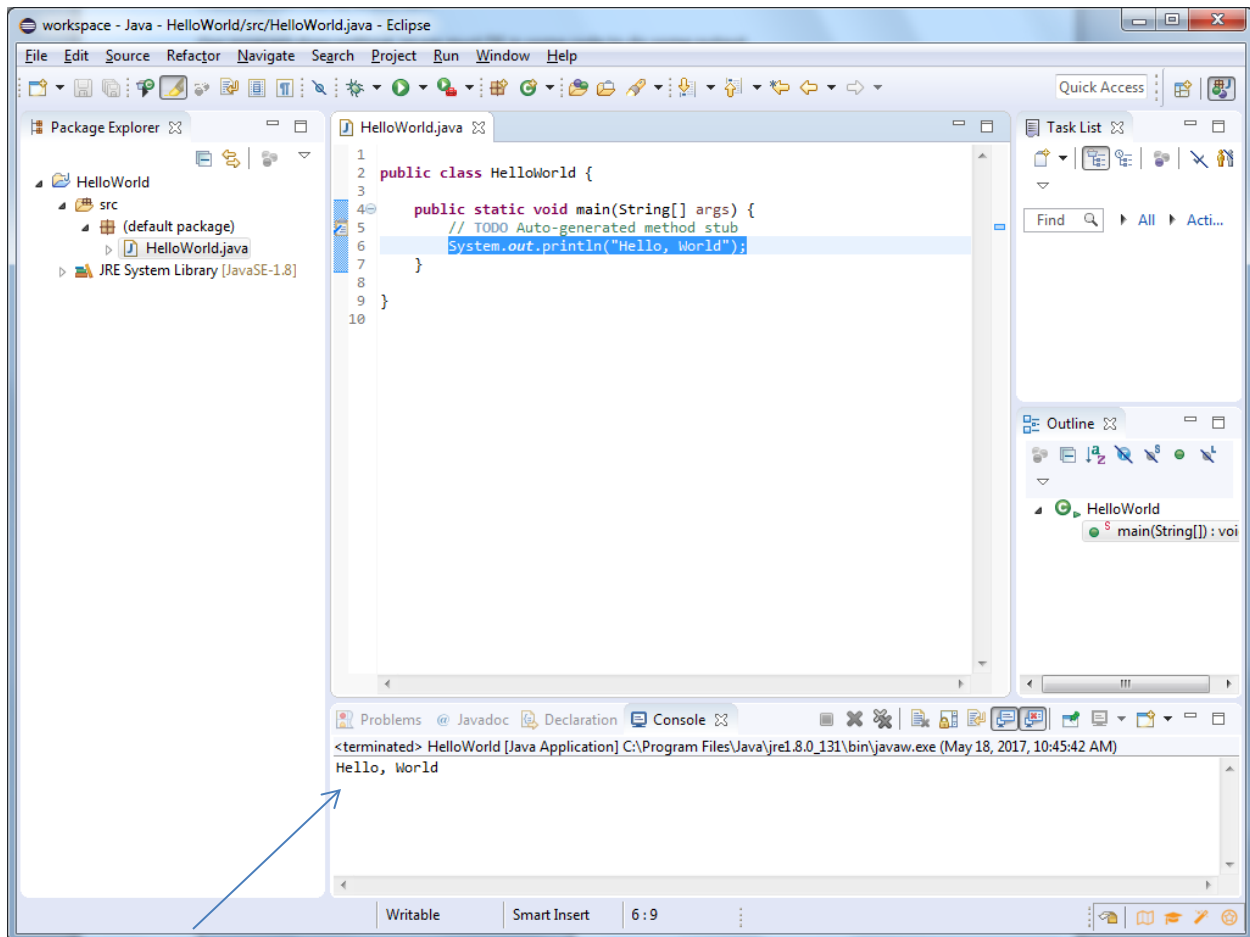

From the **Run** menu, select **Run**.

Our program does nothing, so we must fill in some code to do some output.

On line #6 write the following code:
```
System.out.println("Hello, World");
```

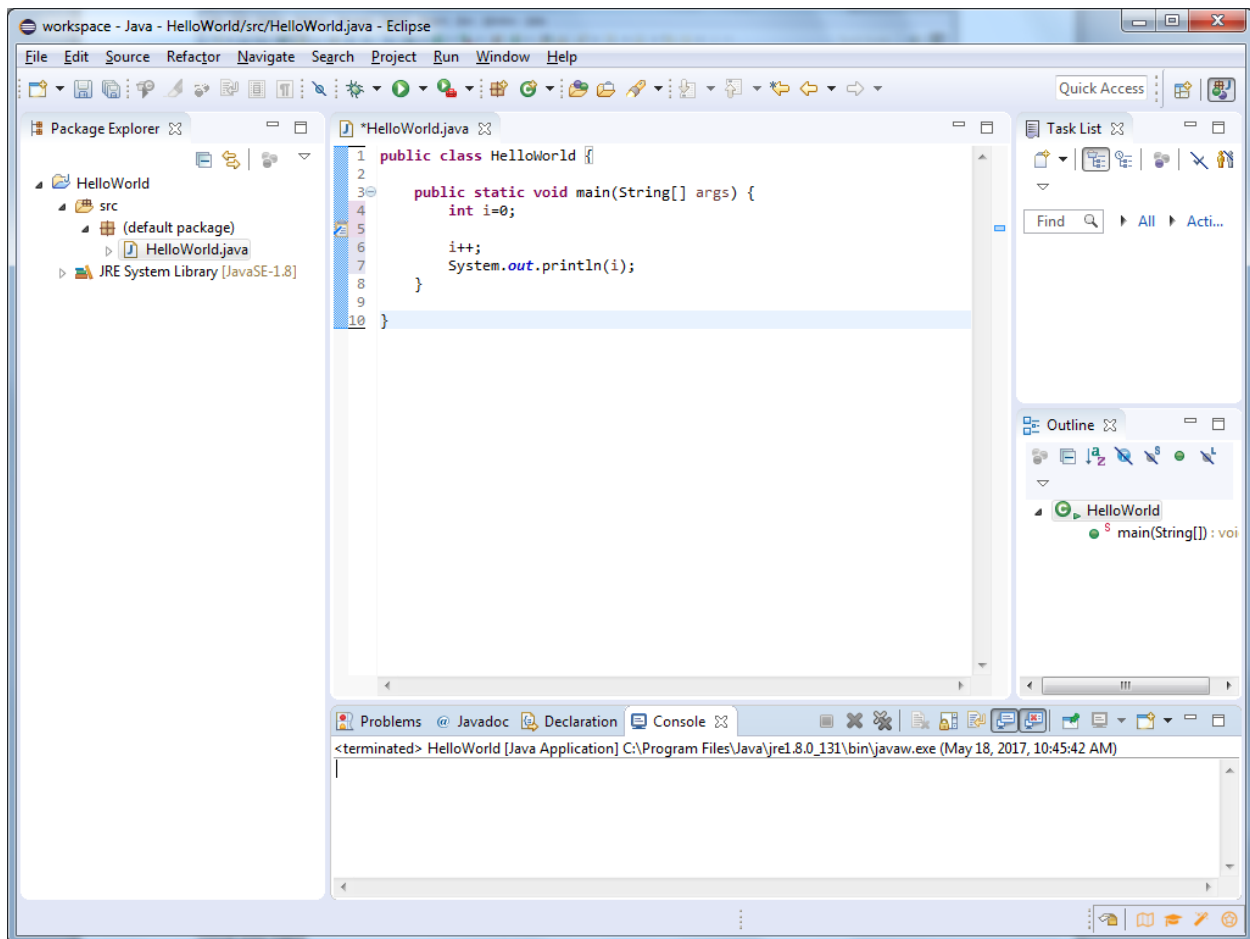Now run the program again. If you did not save it will ask to save it.

The **console** shows the output from the program.

Debugging a program

Let us modify the program so we can get some practice with the debugger.

We will set the code of **HelloWorld.java** to be as follows:

```java
public class HelloWorld {

	public static void main(String[] args) {
		int i=0;

		i++;
		System.out.println(i);
	}

}
```
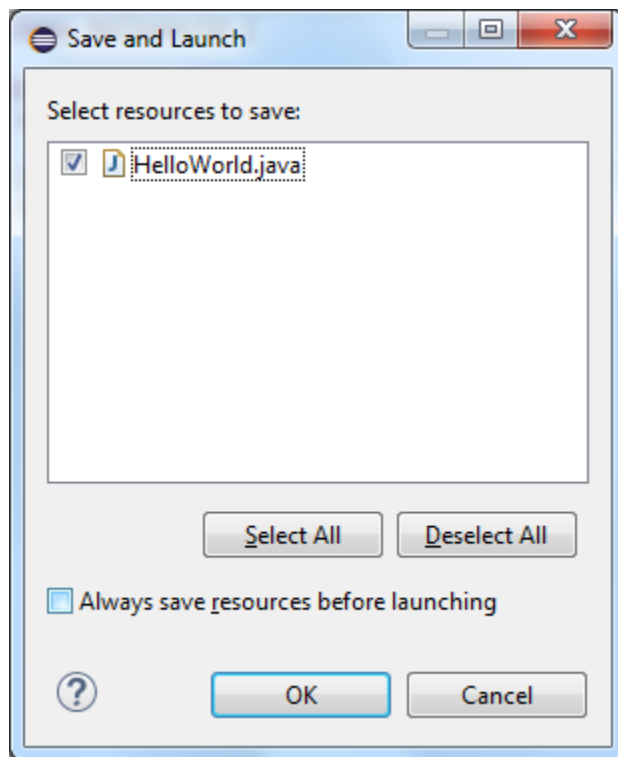
Once you have written the program, set a break point on line #6. Select line #6 in the editing window and press Ctrl-Shift-B.

You can also double click on left margin next to the line number to toggle a line break point. A break point is indicated by a dot in the left margin.
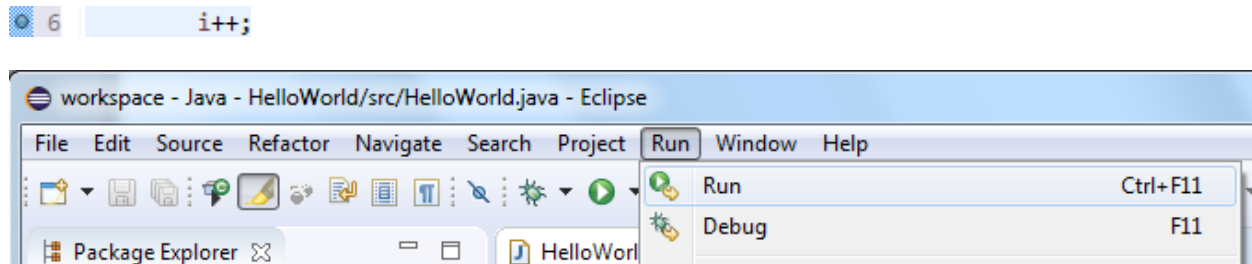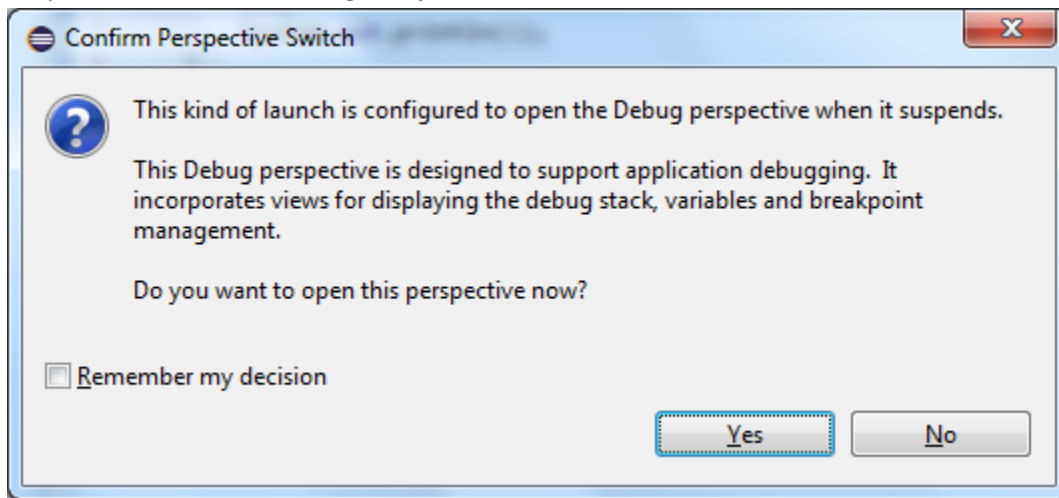

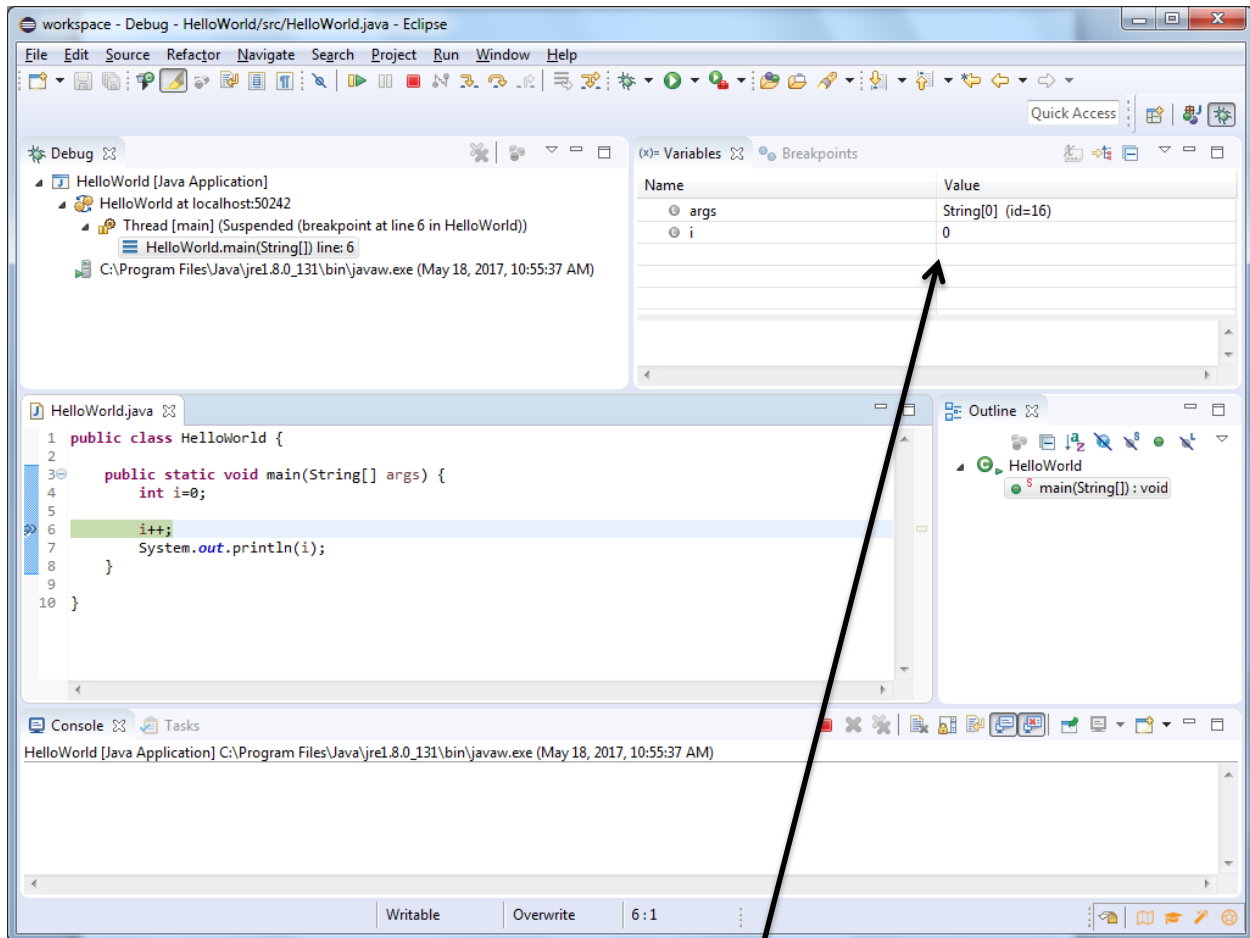From the **Run** menu, select **Debug**.

If your file is not saved, let the Eclipse save it.

Eclipse will switch to a **Debug Perspective**. Select **Yes**.

If you don't want this warning to appear again, select to "Remember my decision".

The program stops (or "breaks") your program when it reaches the break point. The Variables in your program or shown in the Variables panel above. Line #6 was not executed, therefore the value of `i` is listed as 0.
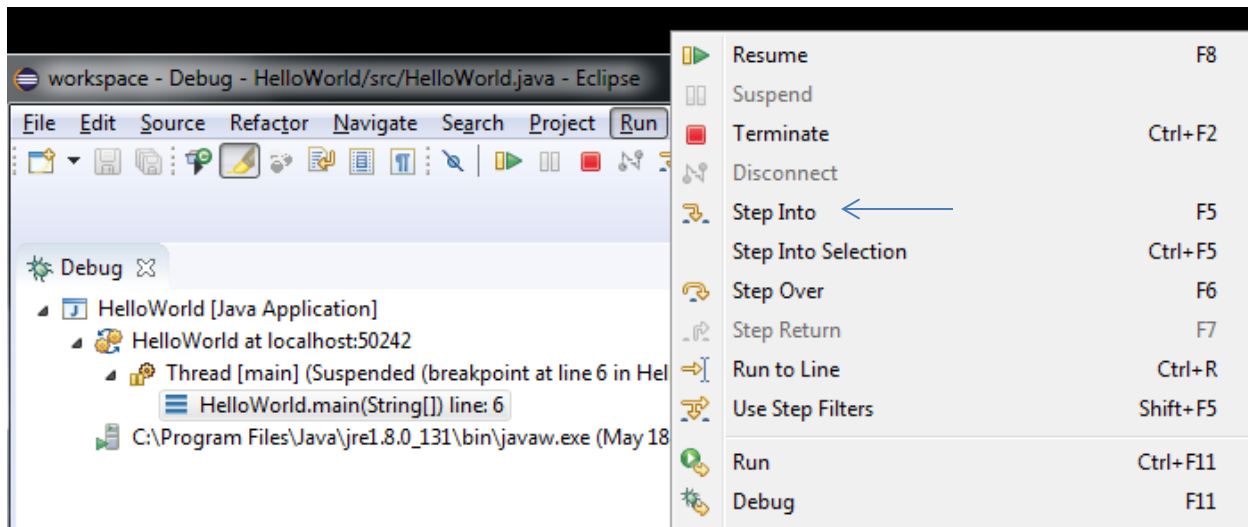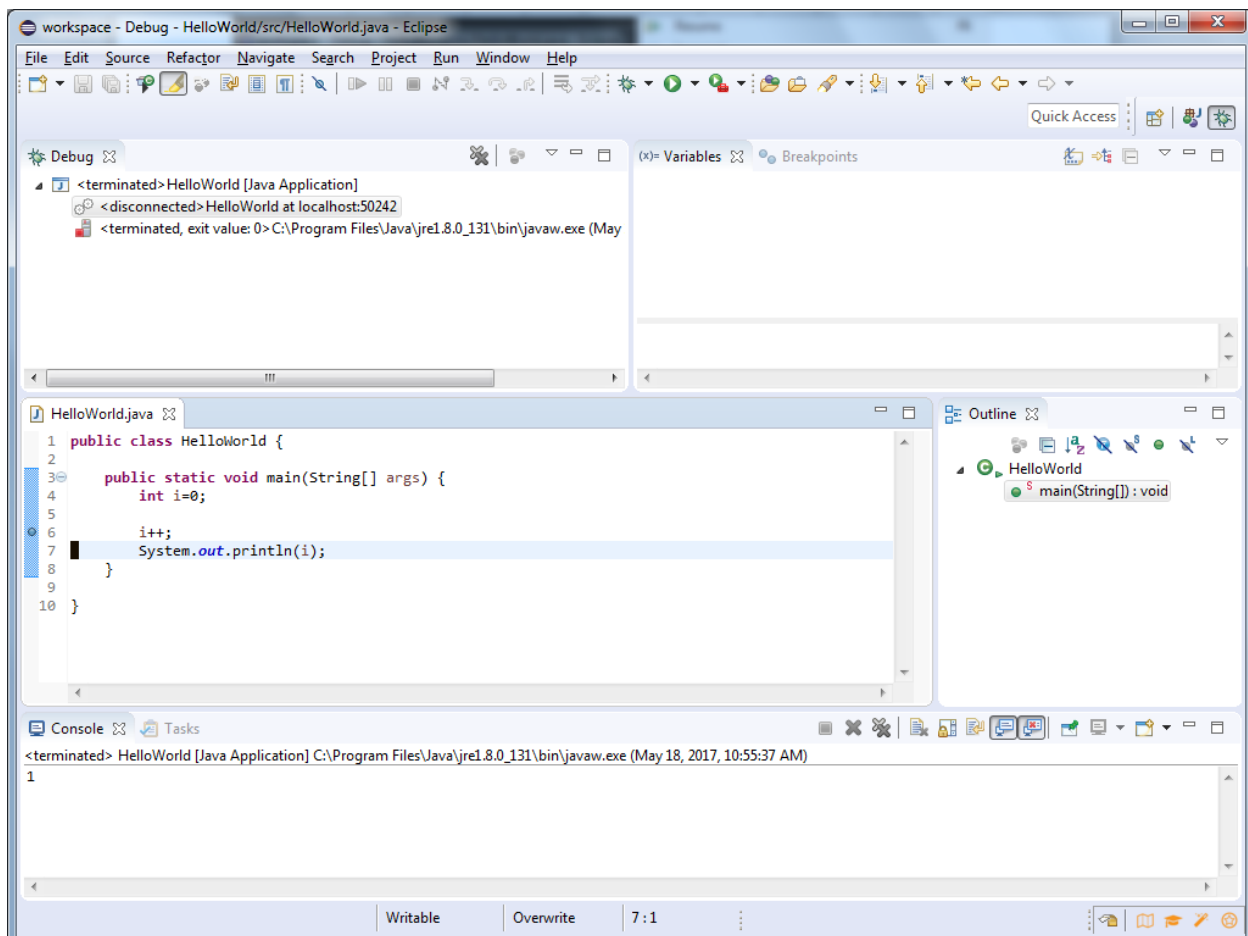
From the **Run** menu, select **Step Into** to see the next instructions. Pressing **F5** will let you step through your program one instruction at a time.
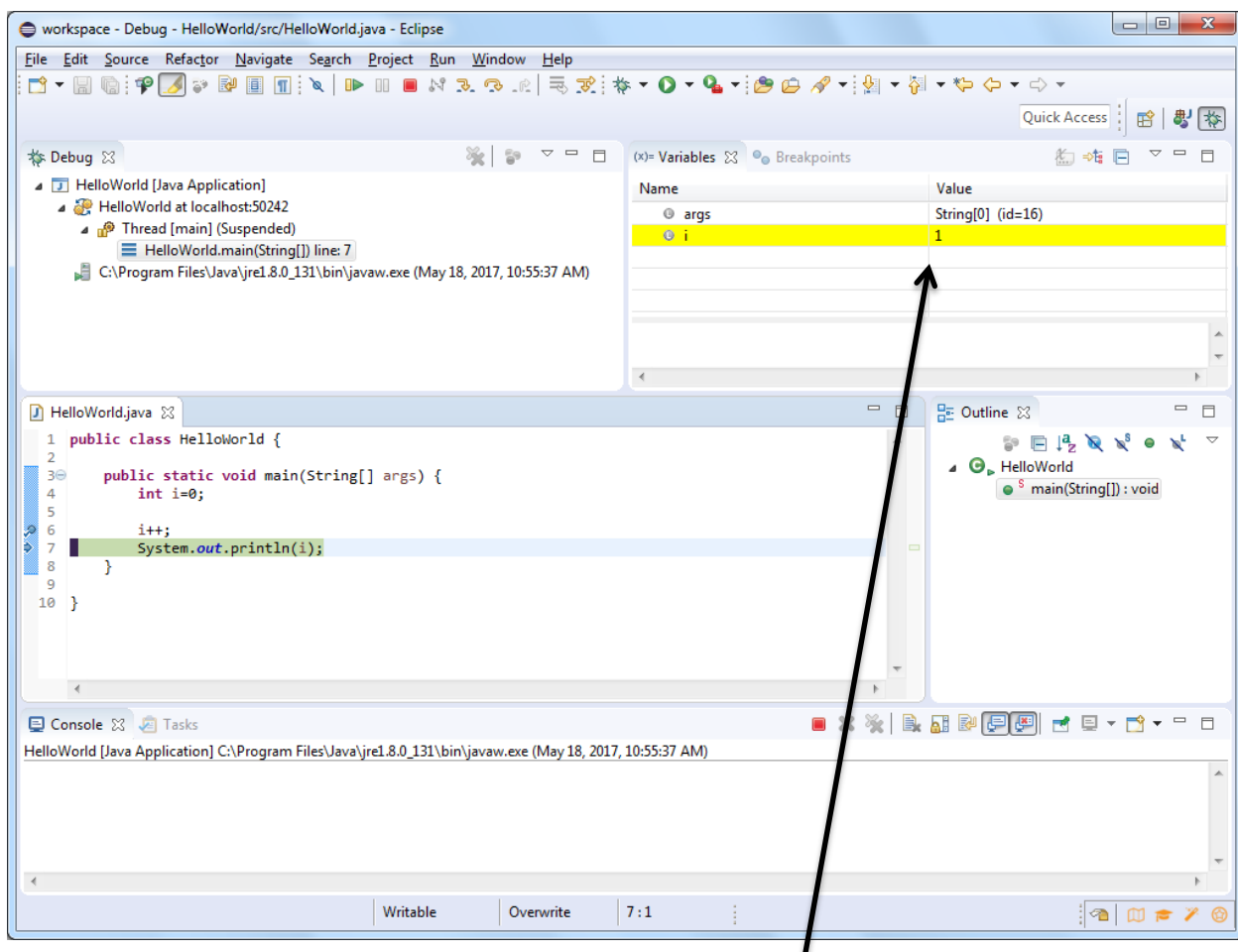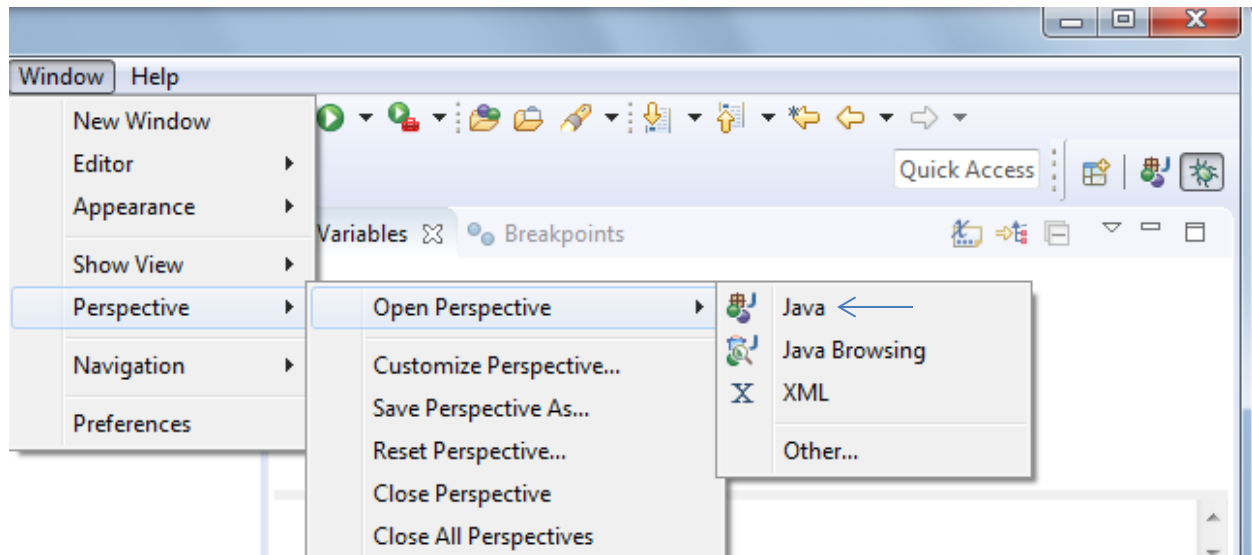

Line #6 is executed and now the value of i becomes 1 as indicated by the highlighted value above.
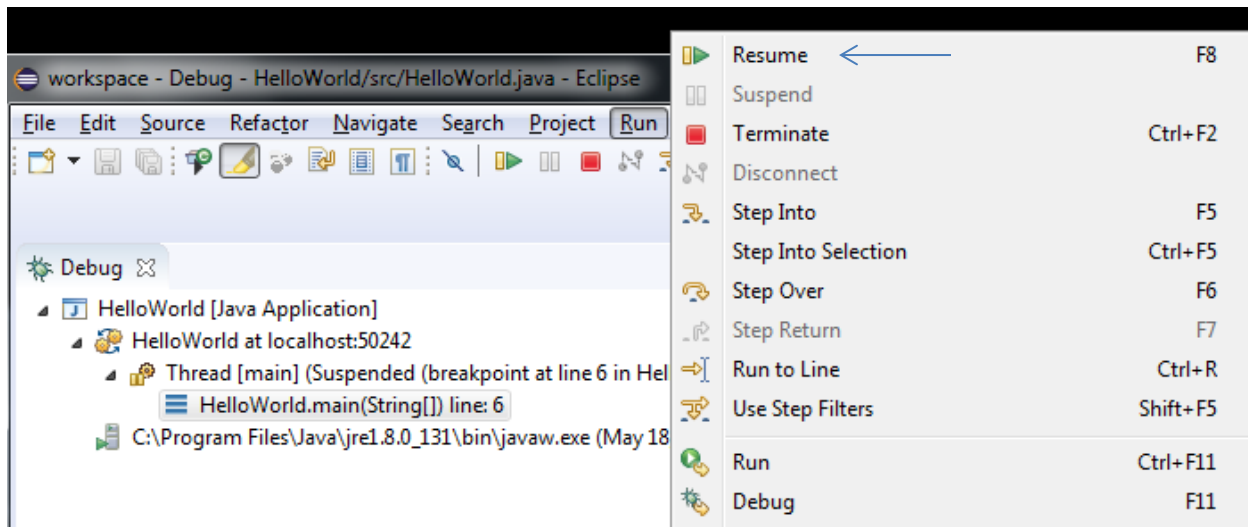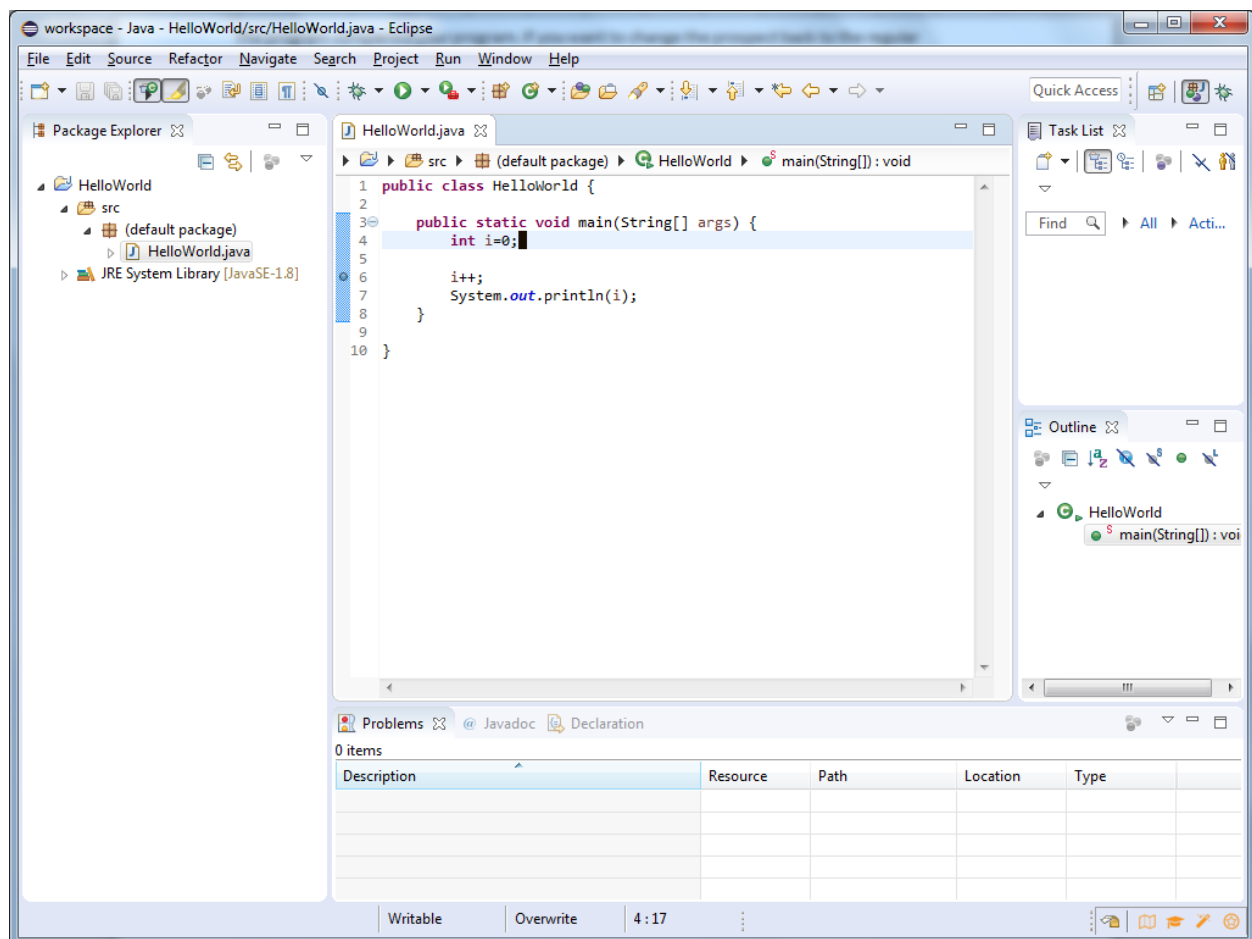
From the **Run** menu you can select **Resume** (F8) to allow the program to finish running.

The debugger completed your program. If you want to change the prospect back to the regular prospective, you can.
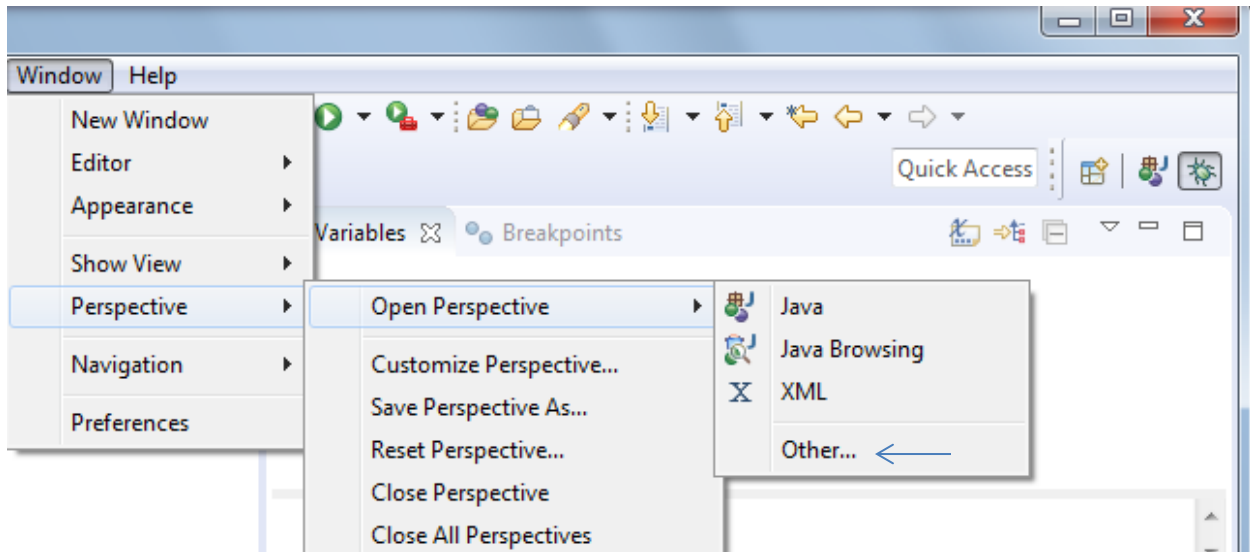
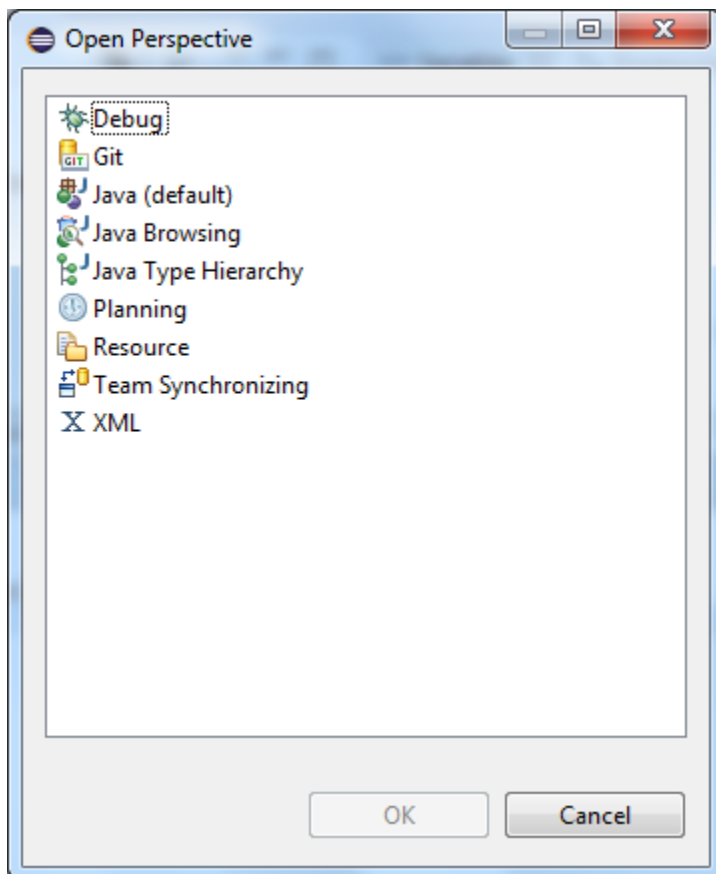From the **Window** menu, select **Perspective**, **Open Perspective**, and select **Java**.

Back as the Java prospective.

If you prefer to work in the "Debug" (or some other) perspective, you can access it from the "Other Perspective" menu.
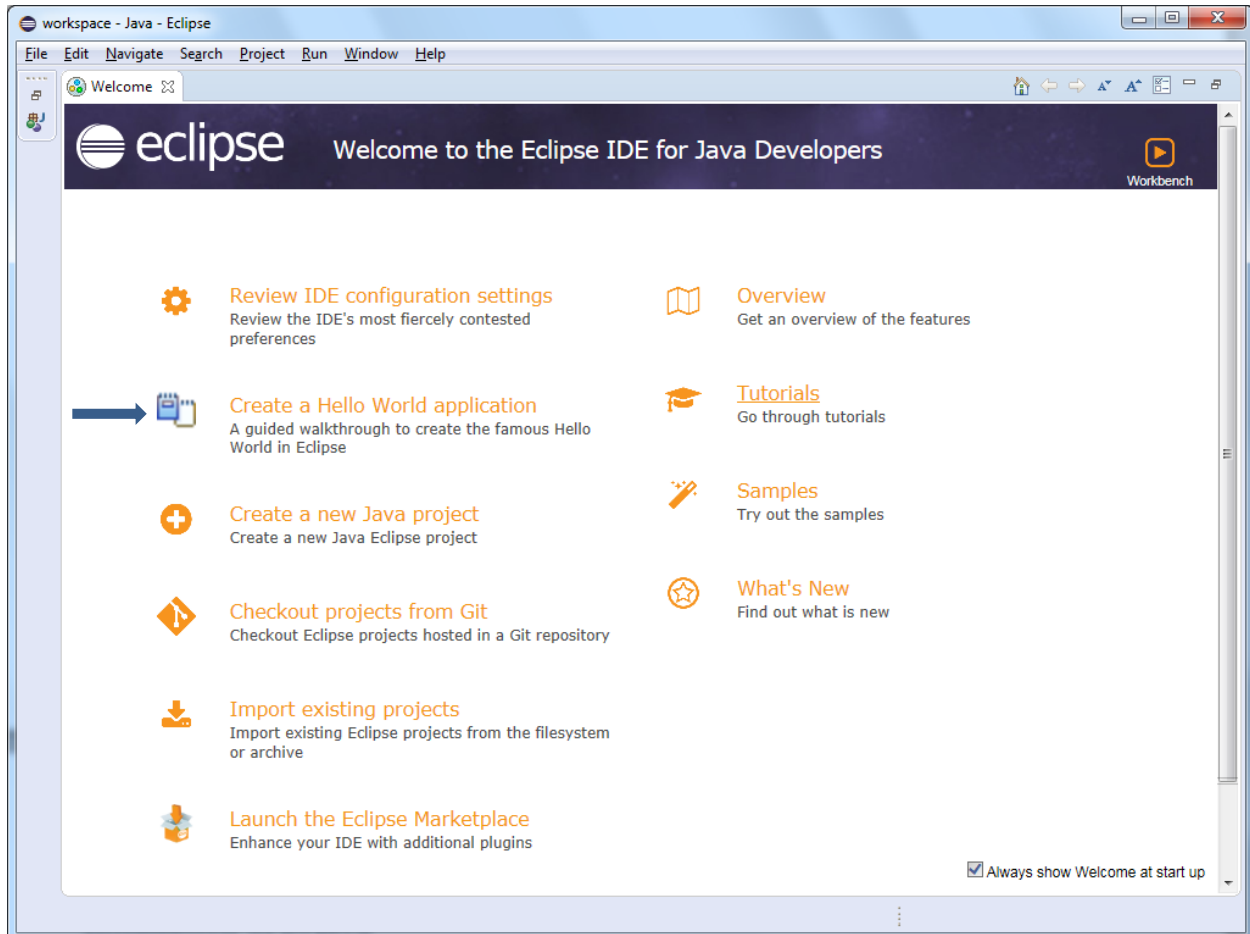

From the **Window** menu, select **Perspective**, **Open Perspective**, and select **Other**.
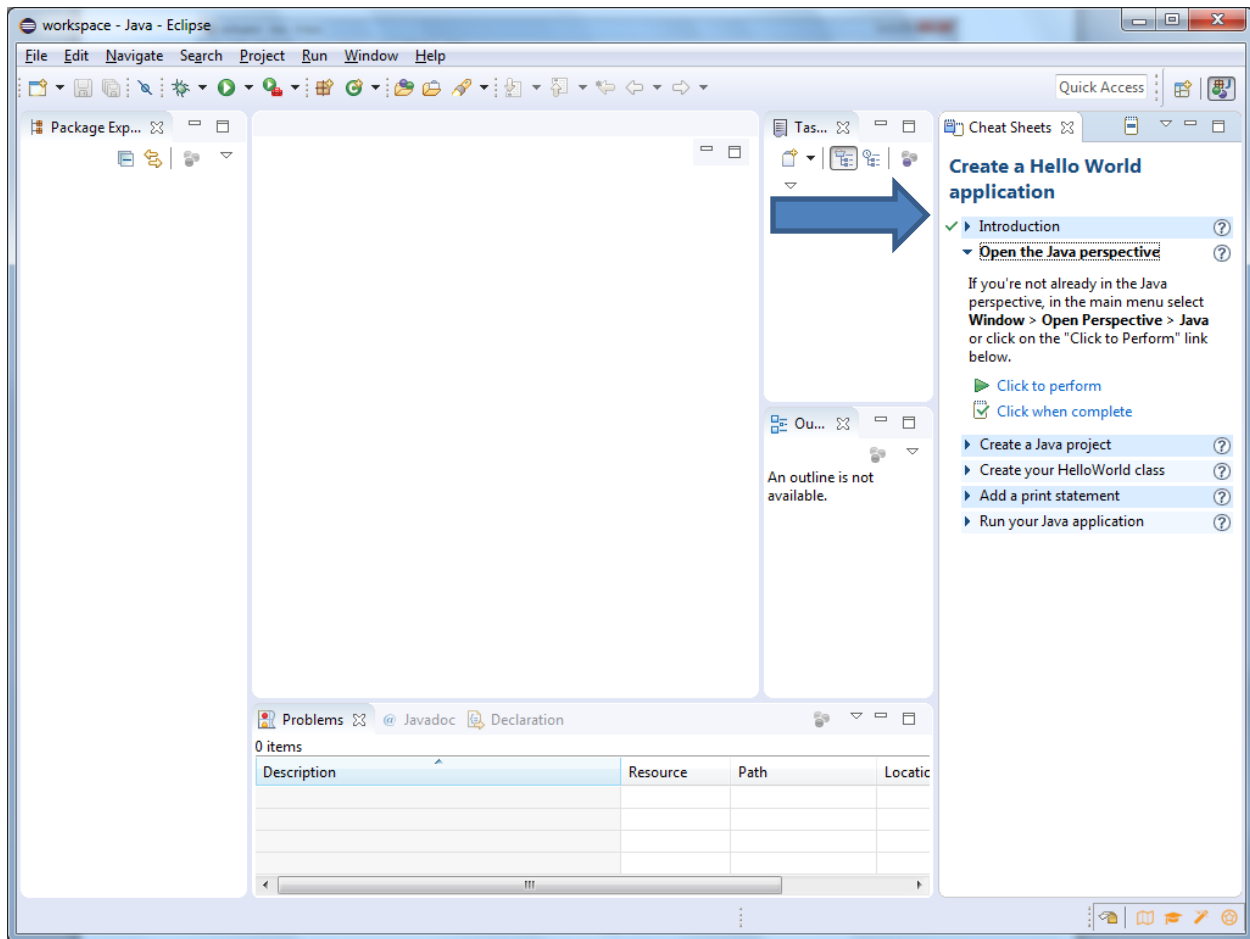
Tutorial: Create a Hello World Application

Select from the **Help** menu, select **Welcome screen**.

Select **Create a Hello World application**.

Follow the guide on the right. Click on the ▶ near a topic to learn more about it. Such as:
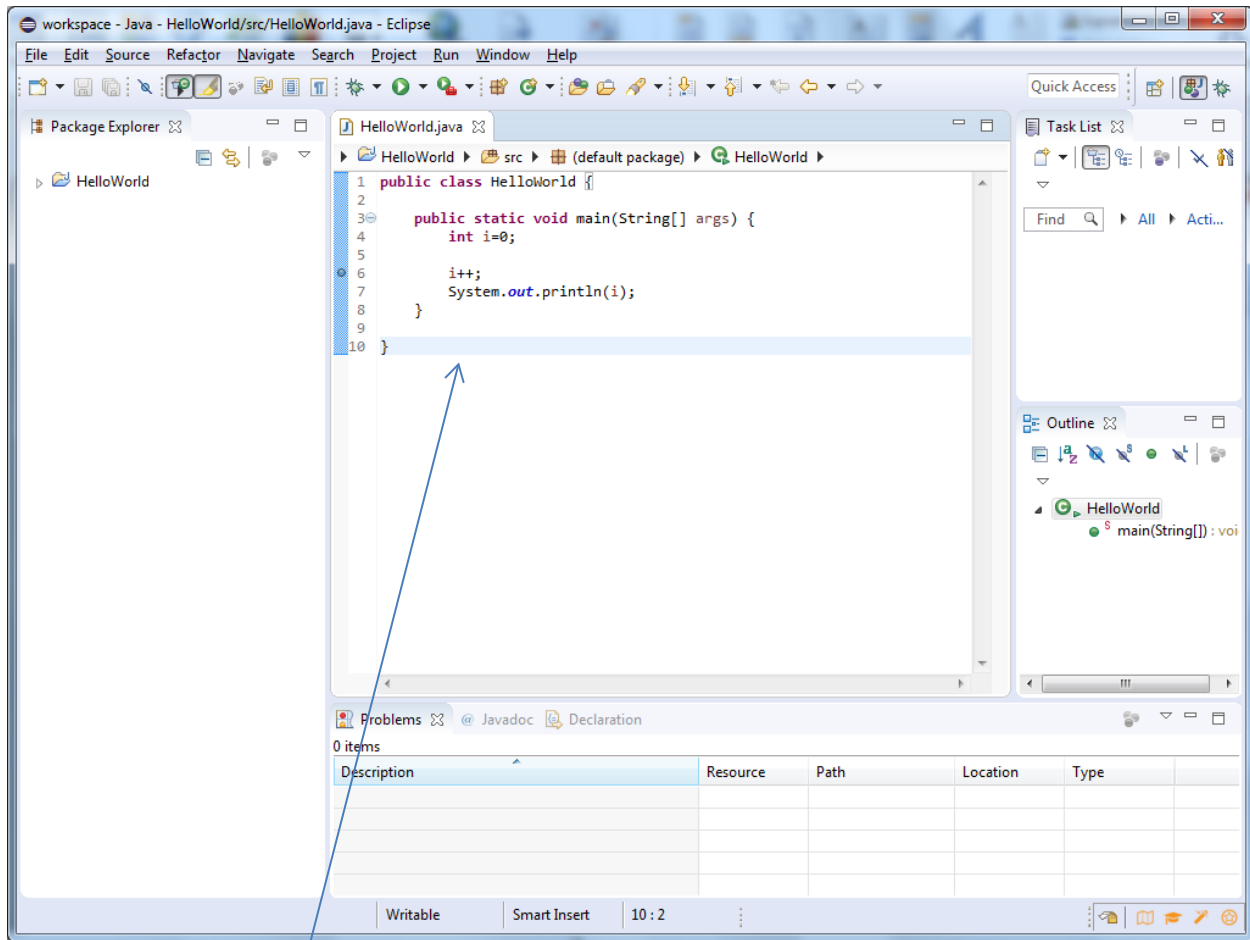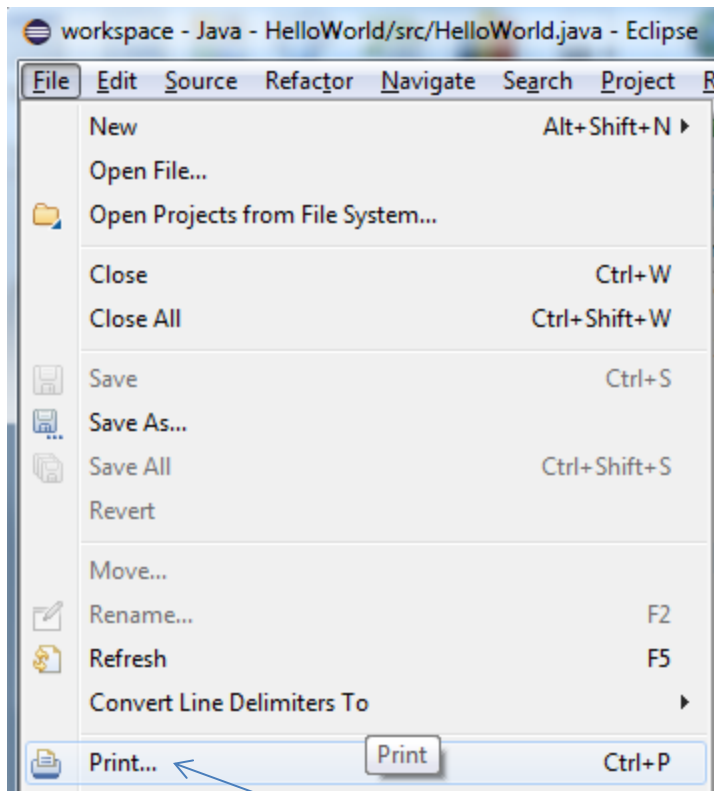

Follow the instructions.

Printing

Make sure the editor panel is active.

From the File menu, select **Print.**