

# An Introduction to Eclipse

## Eclipse IDE for Java Developers

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# What is Eclipse?

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- Eclipse is an integrated development environment (IDE) for developing applications using the Java programming language and other programming languages such as C/C++, Python, PERL, Ruby etc.
- Eclipse is free to download and install.

# Downloading and Installing Eclipse

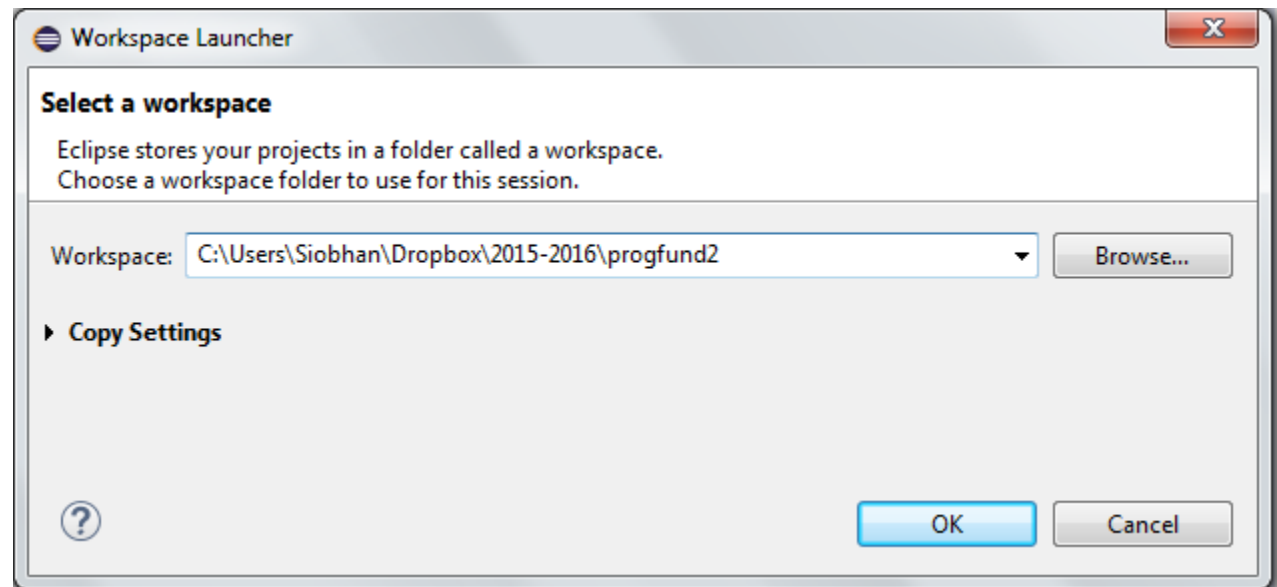
- <http://www.eclipse.org/downloads/>

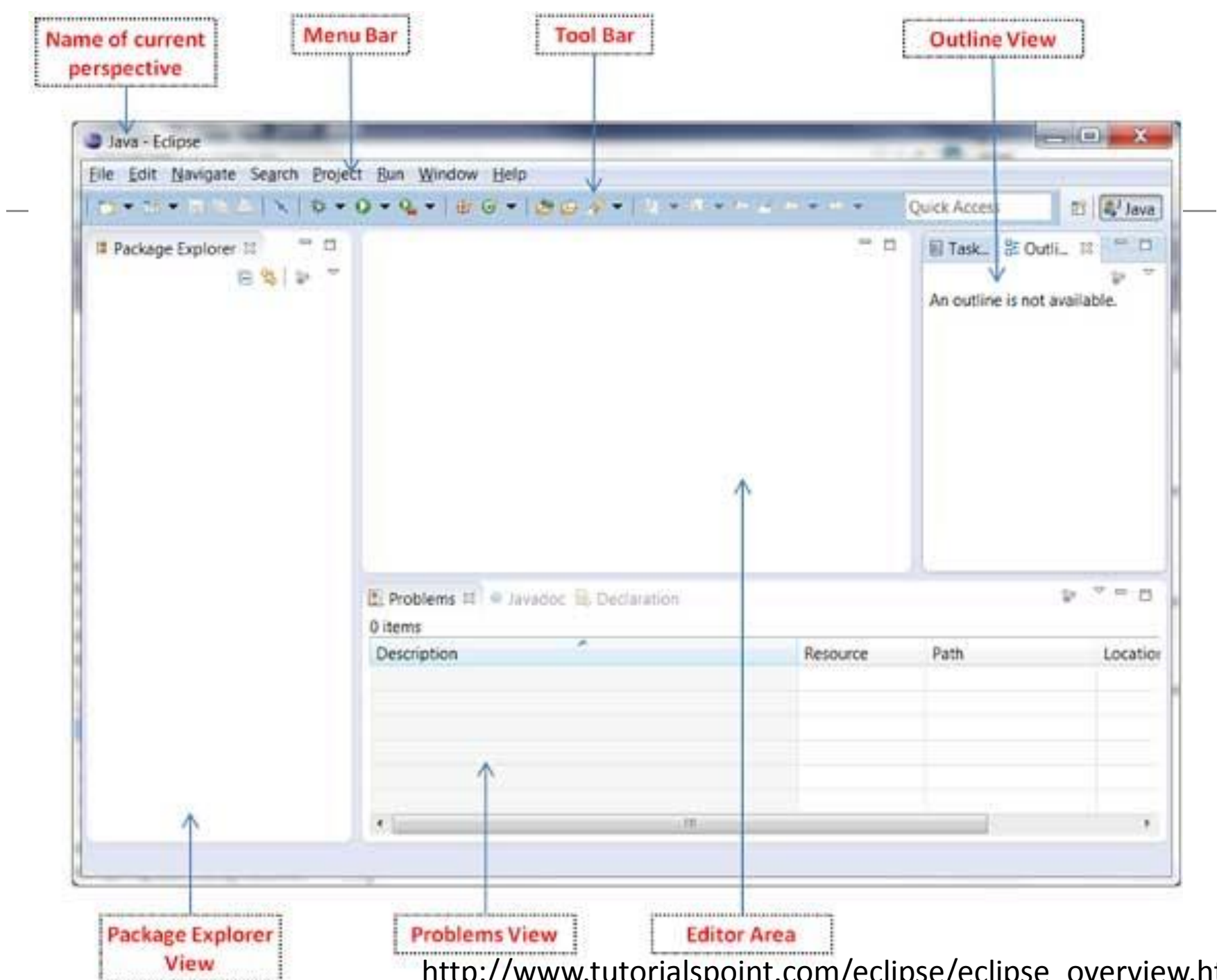
	<h3>Eclipse IDE for Java EE Developers</h3> <p>275 MB 1,850,647 DOWNLOADS</p> <p>Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn...</p>		Windows 32 bit   64 bit
	<h3>Spring Tool Suite</h3> <p>Complete IDE for enterprise Java, Spring, Groovy, Grails and the Cloud.</p>		★ Promoted Download
	<h3>Eclipse IDE for Java Developers</h3> <p>166 MB 908,477 DOWNLOADS</p> <p>The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven integration and WindowBuilder...</p>		Windows 32 bit   64 bit
	<h3>Eclipse IDE for C/C++ Developers</h3> <p>176 MB 373,036 DOWNLOADS</p>		Windows 32 bit   64 bit

# Launching Eclipse

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- When eclipse starts up, it prompts you for the location of the workspace folder.
- All your data will be stored in the workspace folder.

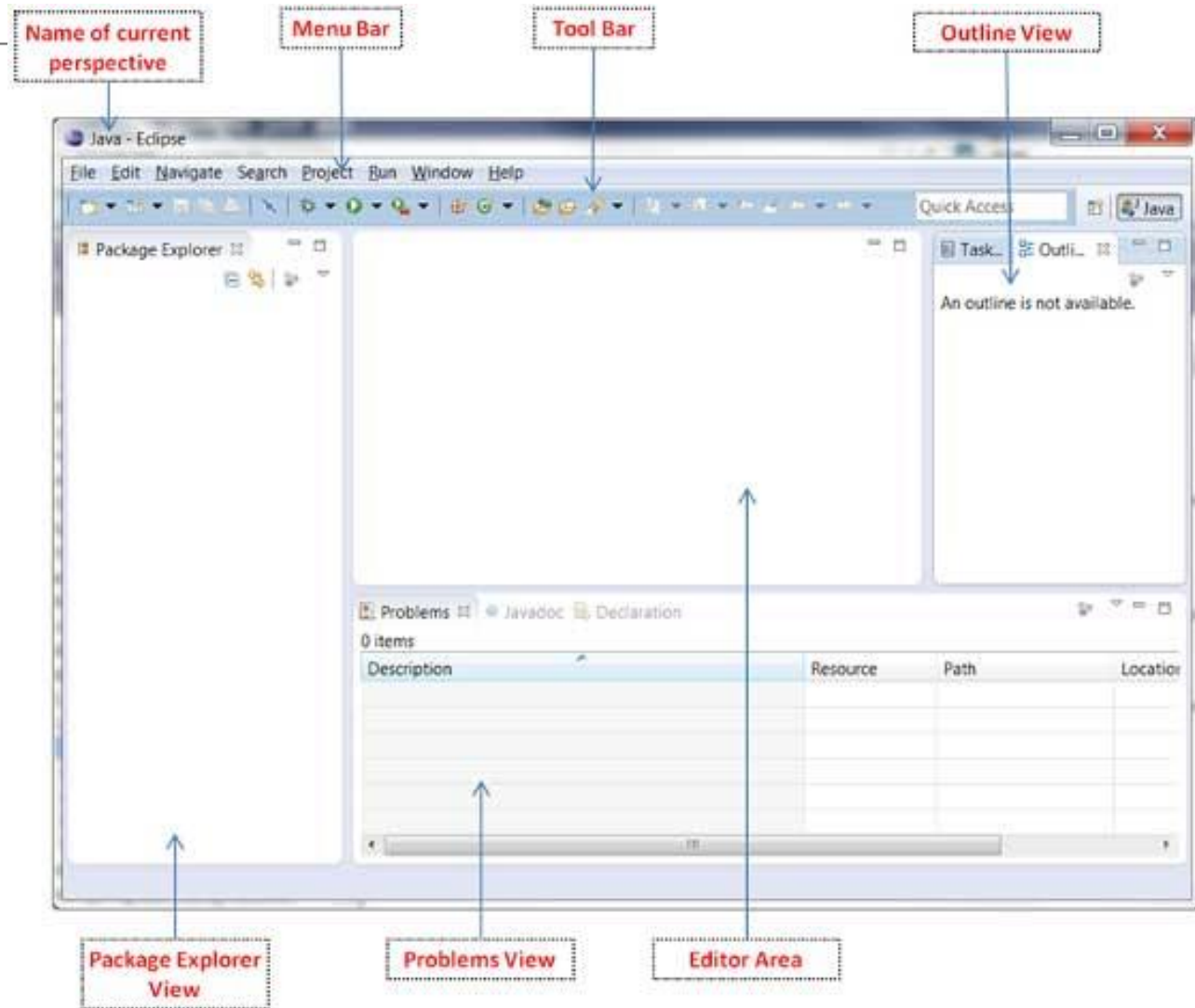


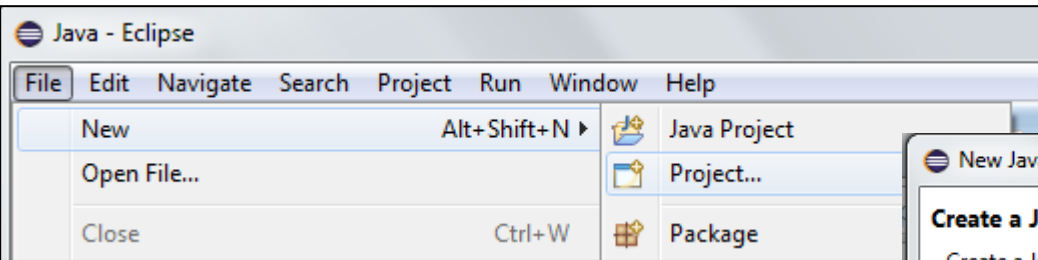


# Perspectives

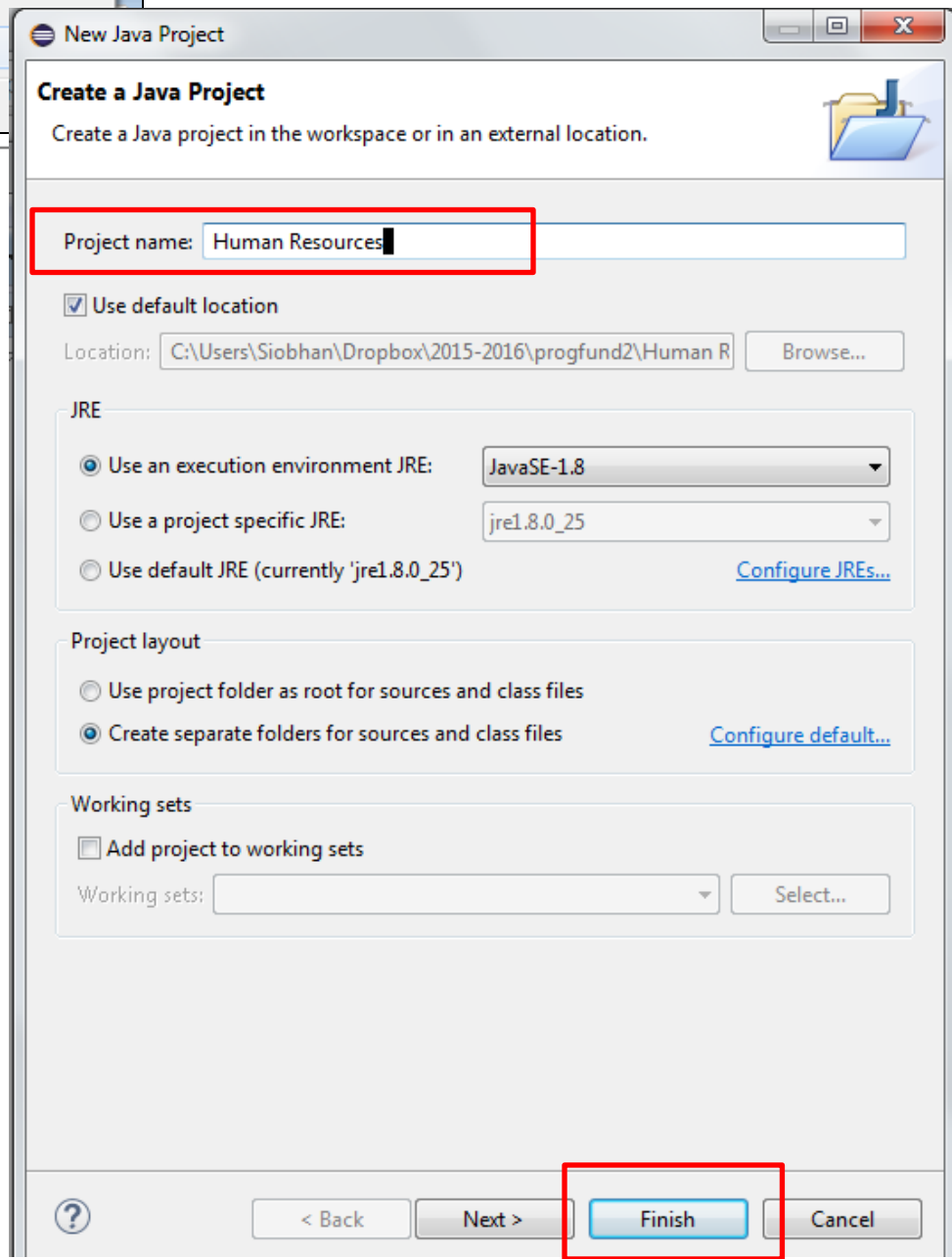
An eclipse perspective is the name given to the arrangement of views and editor area.

The default perspective is called **java**.

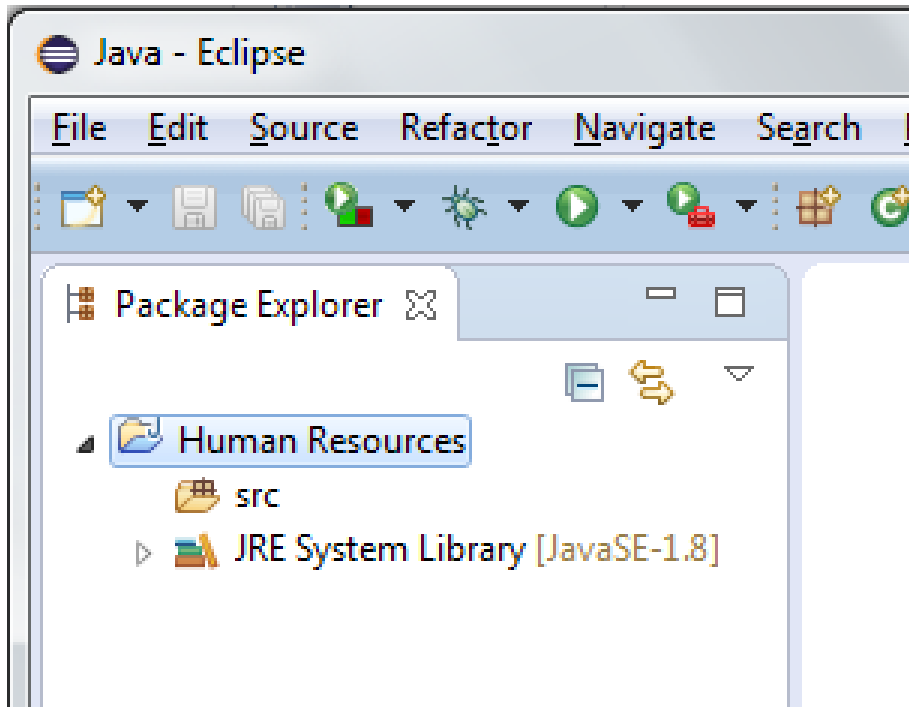




# New Project Wizard



# Viewing the New Project



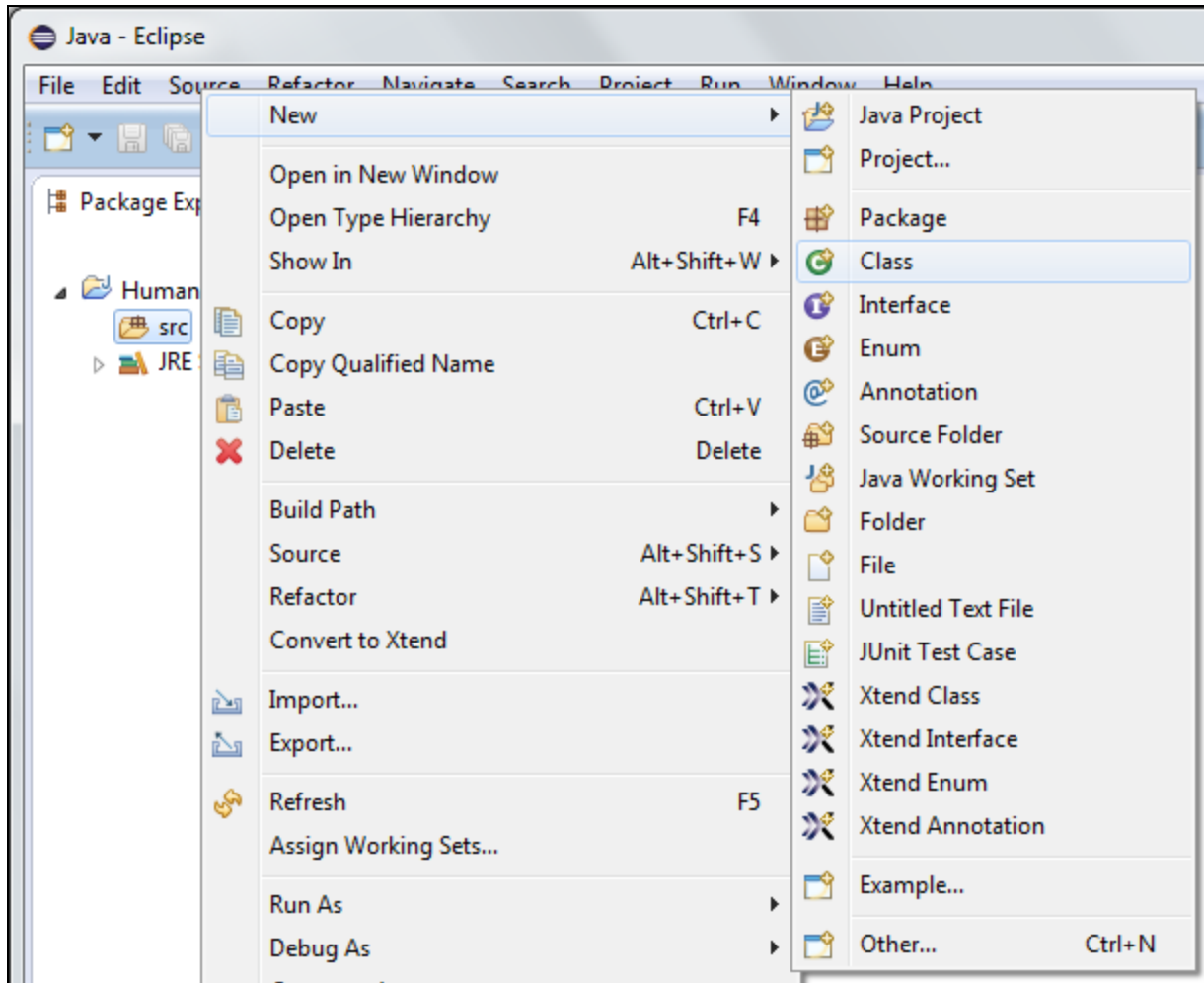
The package explorer shows the newly created Java project.

The icon that represents a Project is decorated with a "J" to show that it is a Java Project.

The folder icon is decorated to show that it is a java source folder.



# New Java Class

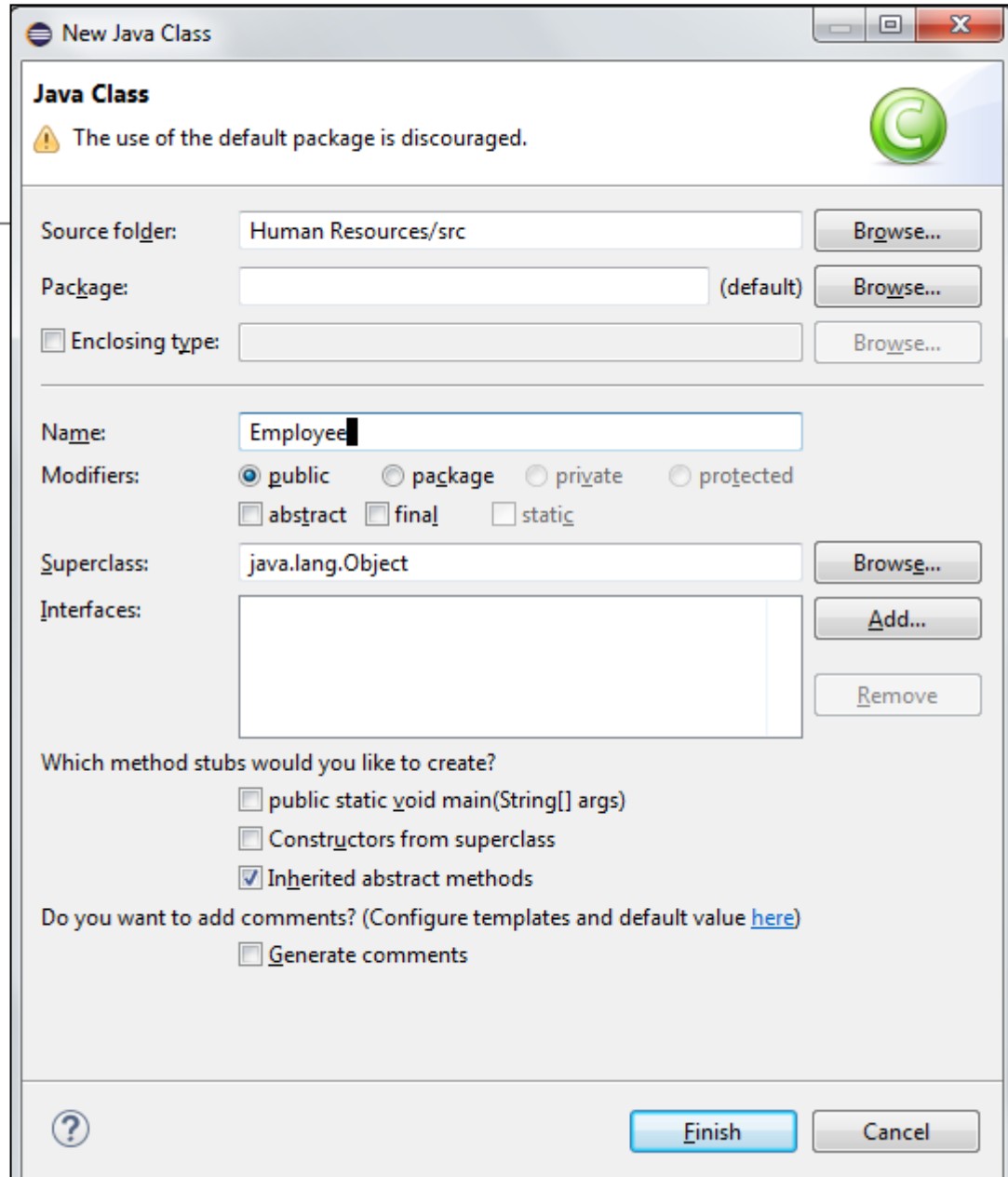


Right click on the **src** folder.

When the context menu appears, select **New**, followed by **Class**.

# New Java Class Wizard

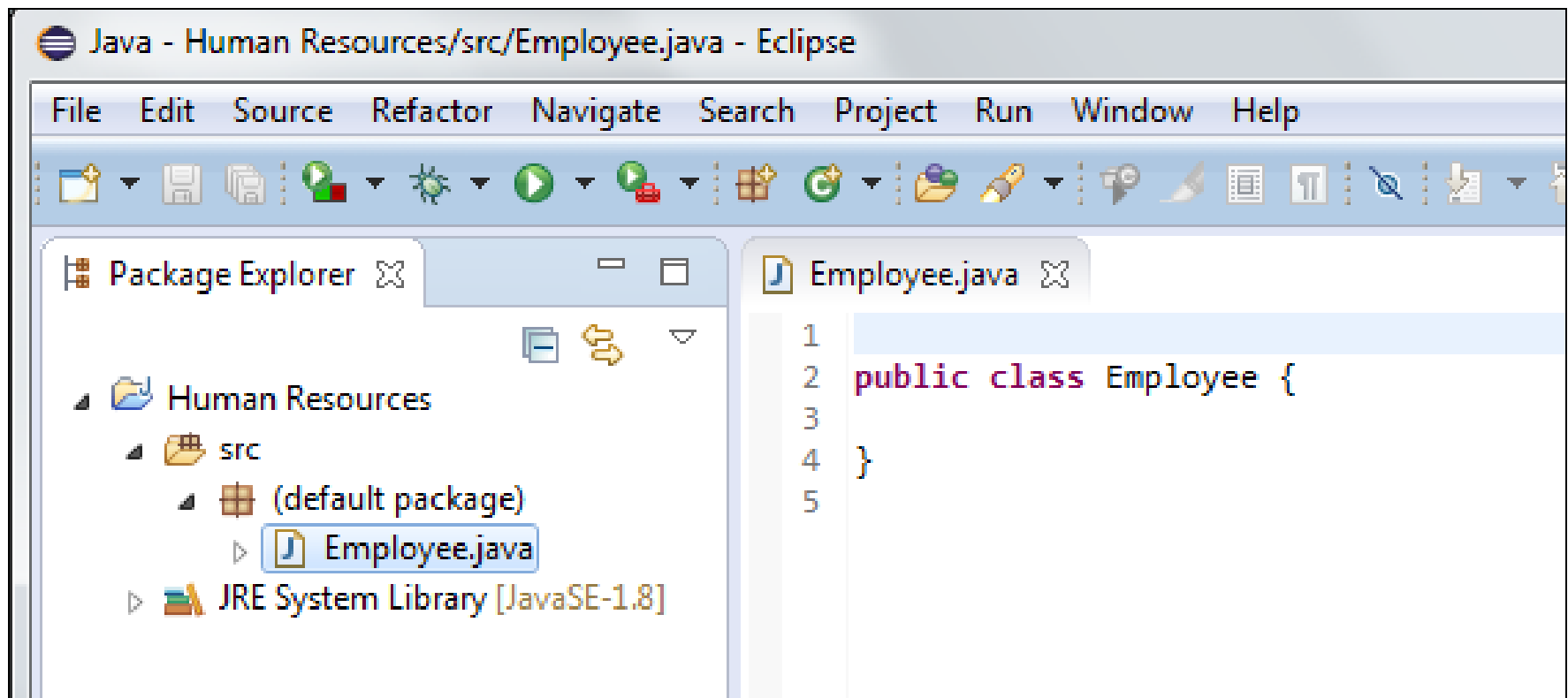
- Ensure the source folder and package are correct
- Enter the class name
- If your class will hold the main method, check the appropriate box to include it automatically.
- Click the Finish button when done.



The screenshot shows the 'New Java Class' dialog box in the Eclipse IDE. The title bar reads 'New Java Class'. Inside the dialog, there's a section titled 'Java Class' with a warning icon and the text 'The use of the default package is discouraged.' and the Eclipse logo. Below this, there are fields for 'Source folder:' (set to 'Human Resources/src' with a 'Browse...' button), 'Package:' (set to '(default)' with a 'Browse...' button), and 'Enclosing type:' (empty with a 'Browse...' button). The 'Name:' field contains 'Employee'. Under 'Modifiers:', there are radio buttons for 'public' (selected), 'package', 'private', and 'protected', and checkboxes for 'abstract', 'final', and 'static'. The 'Superclass:' field is set to 'java.lang.Object' with a 'Browse...' button. The 'Interfaces:' field is empty with 'Add...' and 'Remove' buttons. A section titled 'Which method stubs would you like to create?' has checkboxes for 'public static void main(String[] args)' (unchecked), 'Constructors from superclass' (unchecked), and 'Inherited abstract methods' (checked). Below this, it asks 'Do you want to add comments? (Configure templates and default value [here](#))' with a checkbox for 'Generate comments' (unchecked). At the bottom, there are 'Finish' and 'Cancel' buttons, and a help icon (?) on the left.

# Viewing the New Class

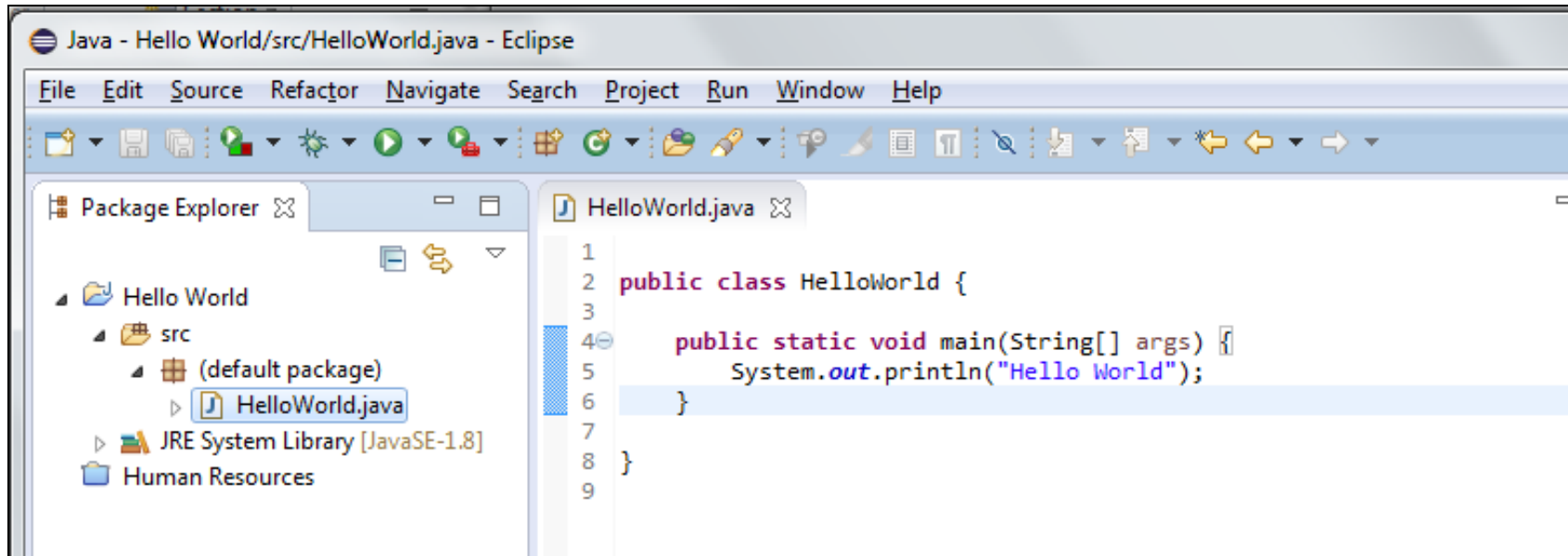
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# Running a Java Program (1)

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- We want to run the following code:



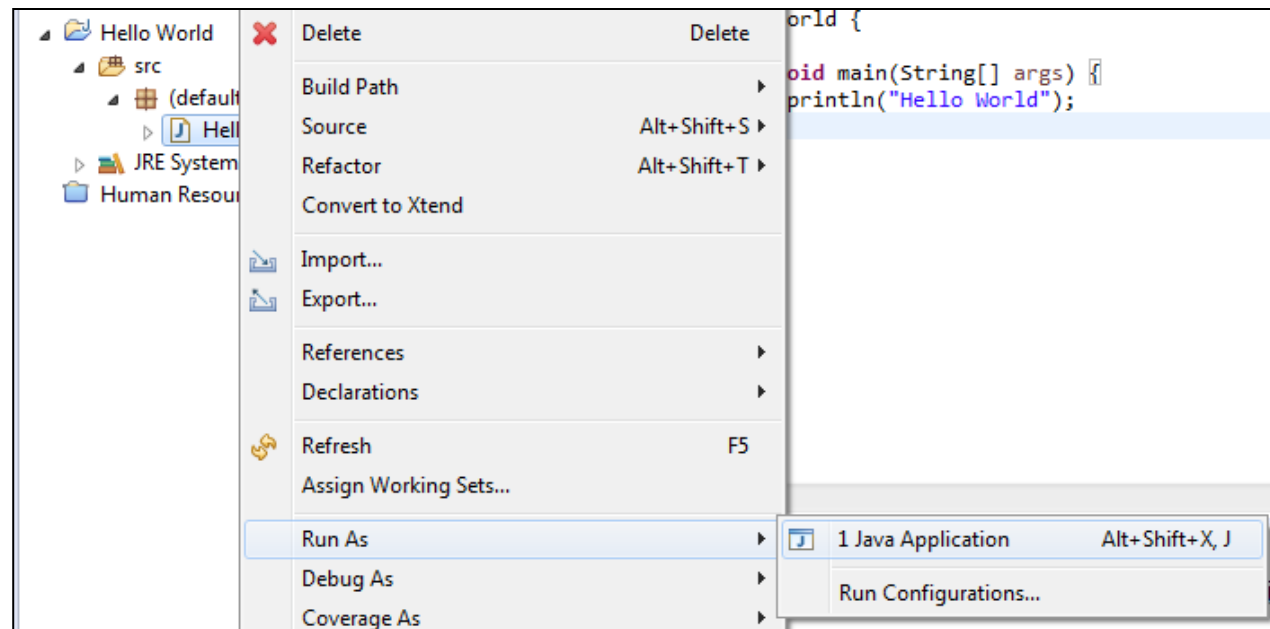
# Running a Java Program (2)

- One way to run a Java program is to use the Package Explorer view.

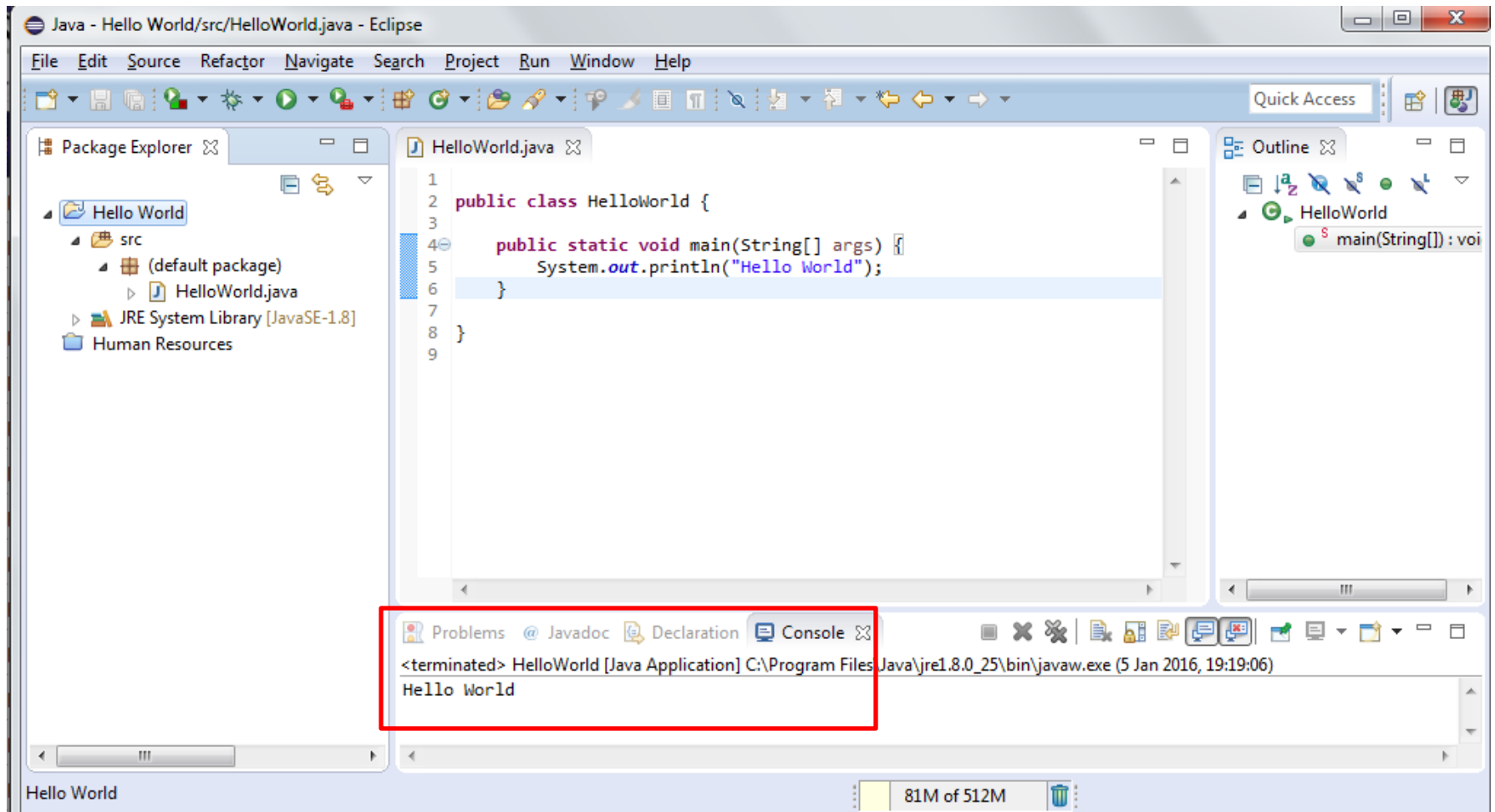
In the Package Explorer view:

Right click on the java class that contains the main method.

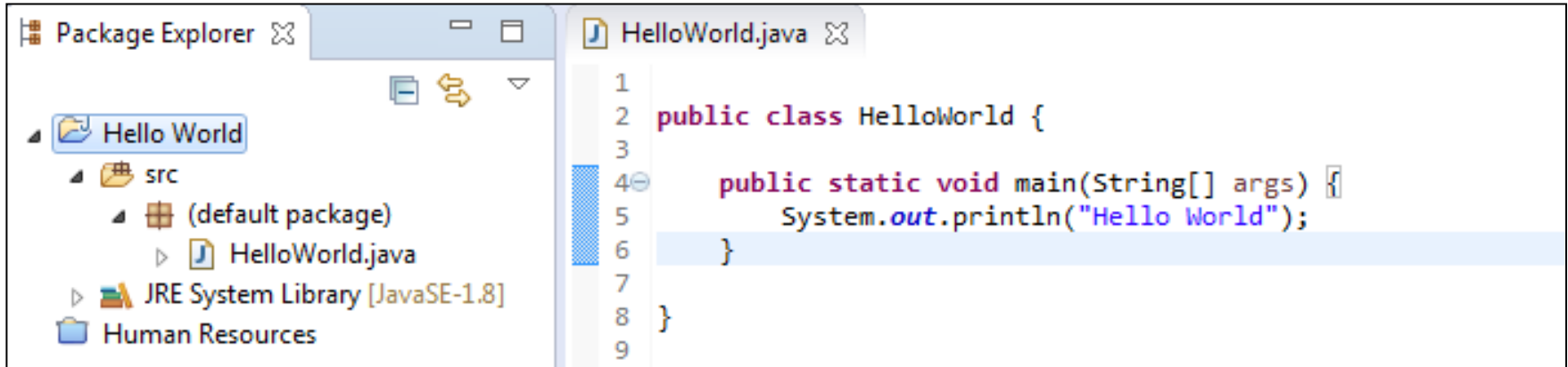
Select Run As > Java Application



# Running a Java Program (3)



# Printing to the Console



- In Processing, we just wrote **print** and **println**. Processing did a lot in the background for us.
- In Java, we write:

**System.out.println();**  
**System.out.print();**

# Questions?

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