

# 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

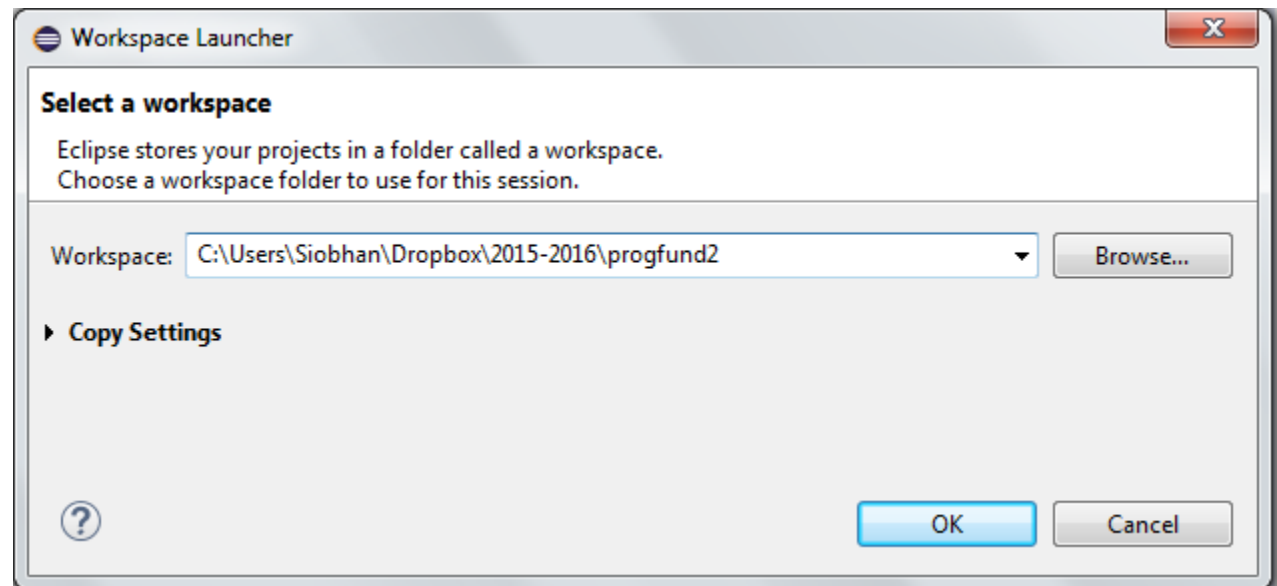
- <http://www.eclipse.org/downloads/>

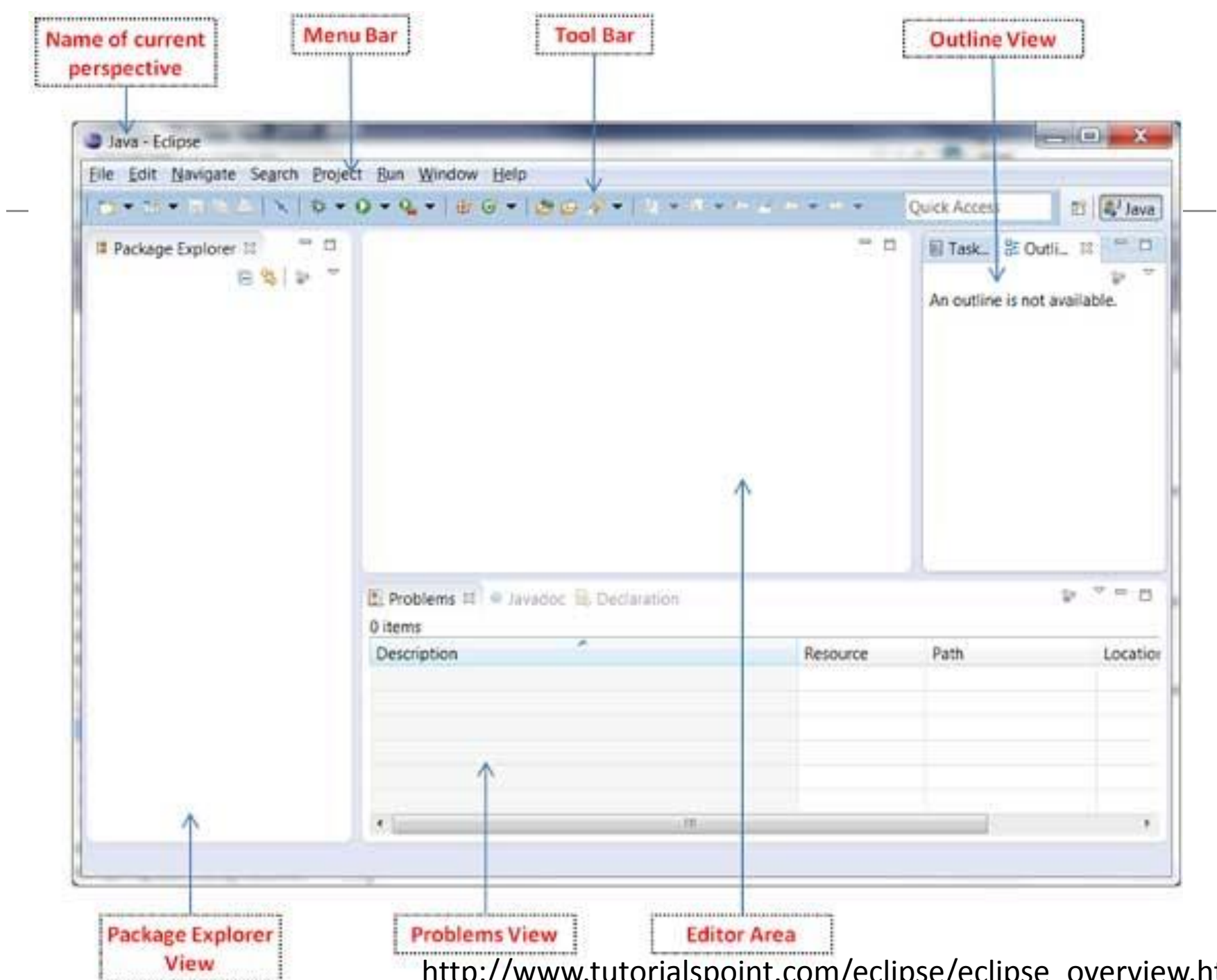
	<h3>Eclipse IDE for Java EE Developers</h3> <p>275 MB 1,850,647 DOWNLOADS</p> <p>Tools for Java developers creating Java EE and Web applications, including a Java IDE, tools for Java EE, JPA, JSF, Mylyn...</p>		Windows 32 bit   64 bit
	<h3>Spring Tool Suite</h3> <p>Complete IDE for enterprise Java, Spring, 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.

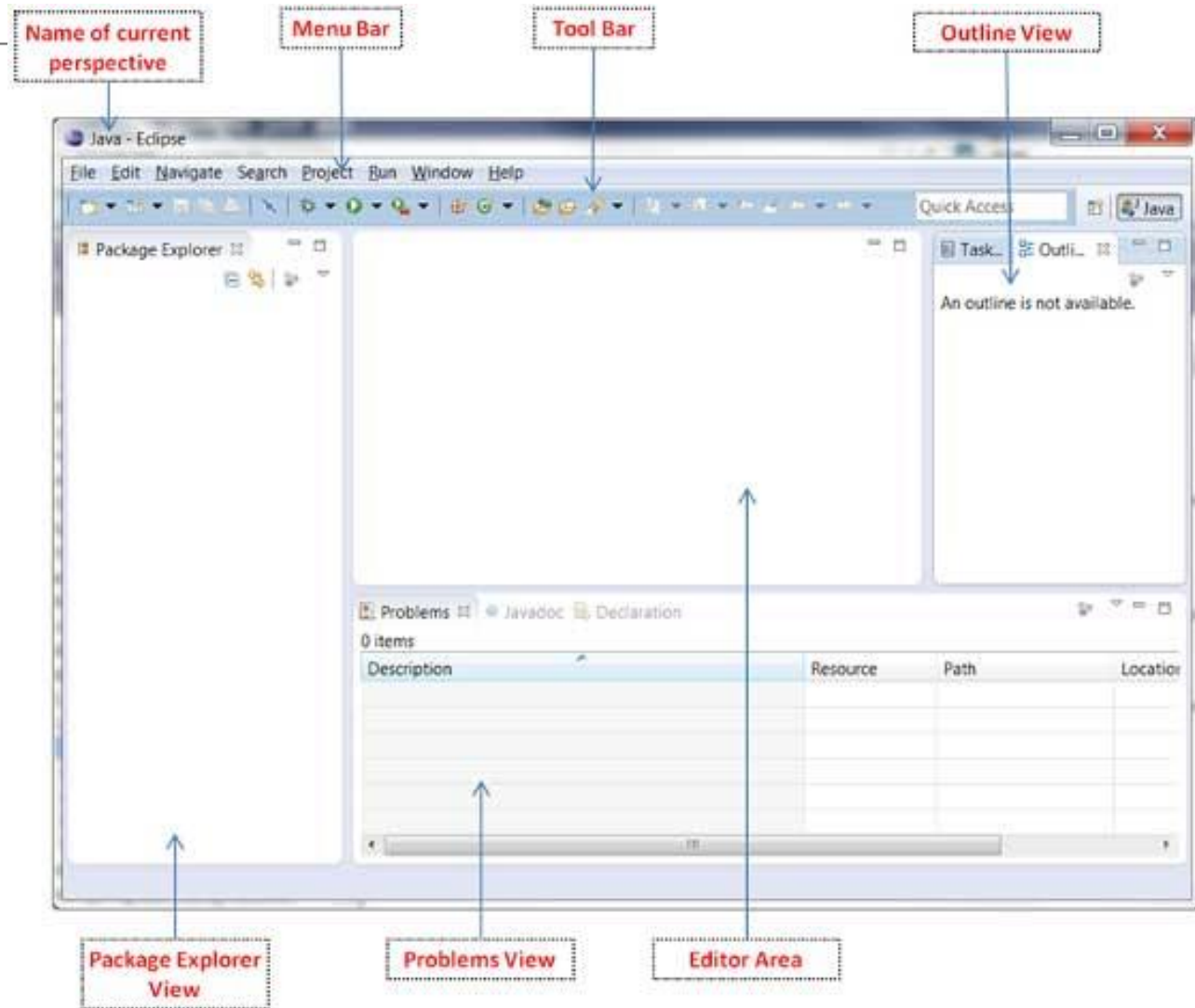




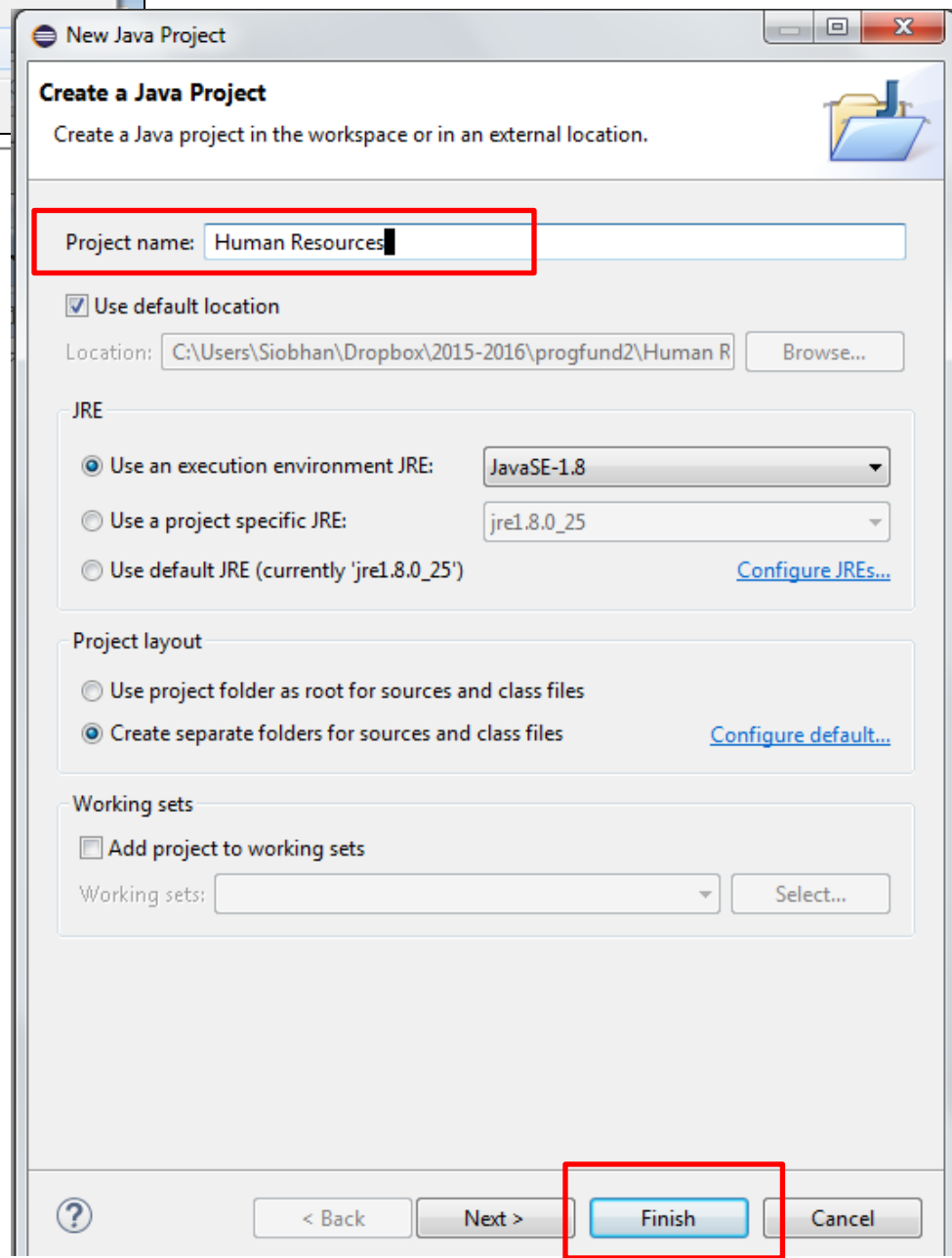
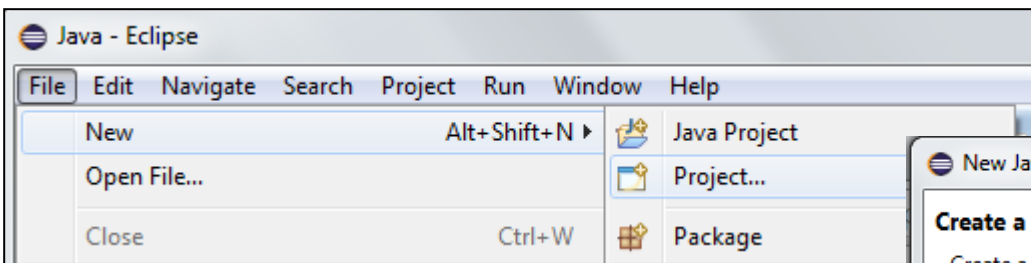
# Perspectives

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

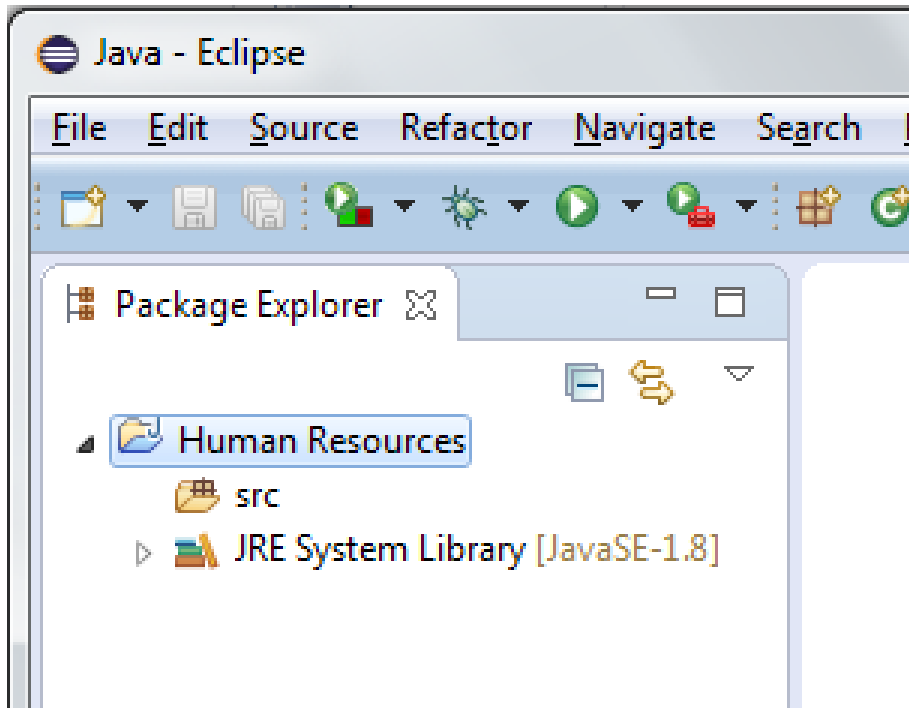
The default perspective is called **java**.



# New Project Wizard



# Viewing the New Project



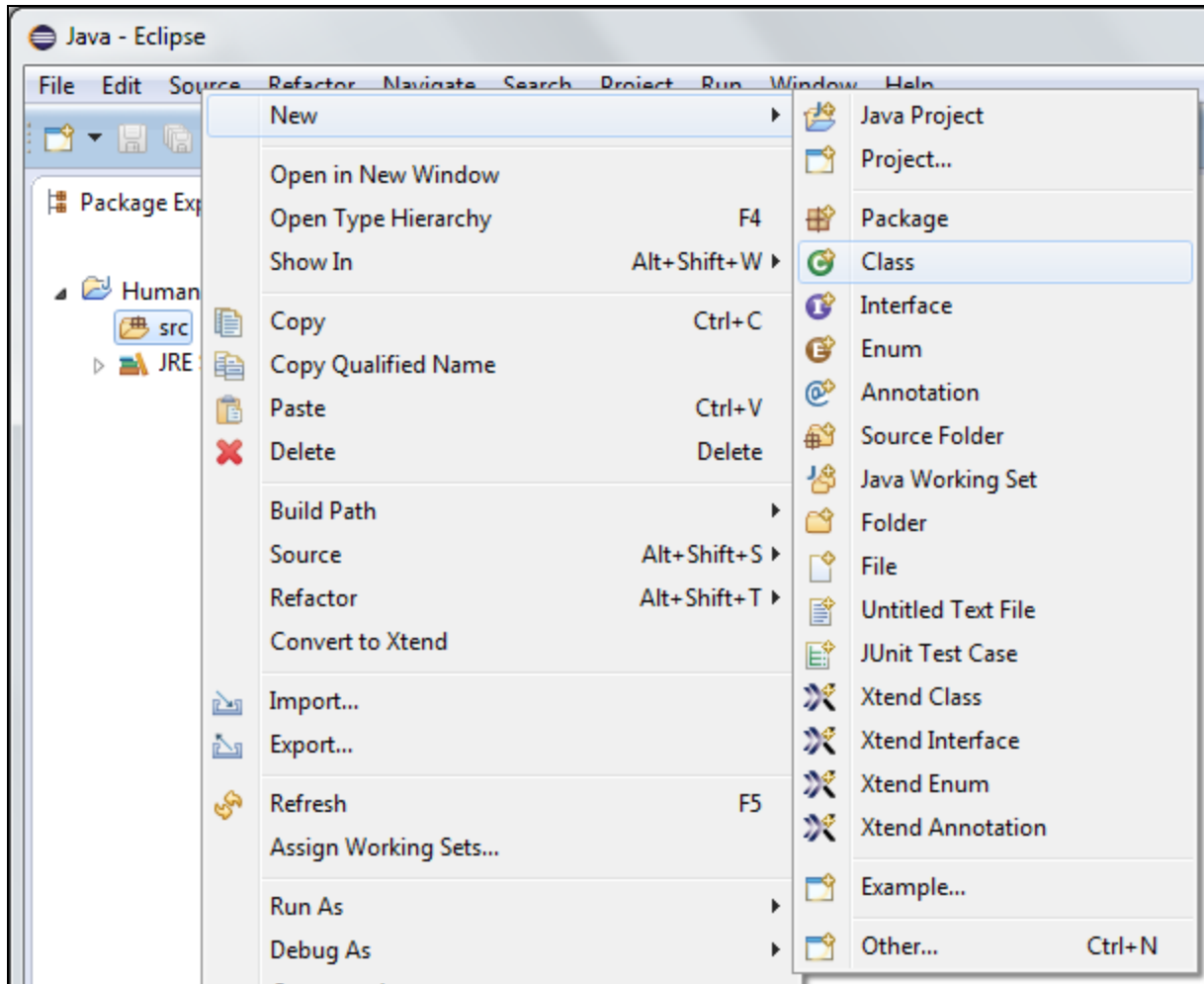
The package explorer shows the newly created Java project.

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

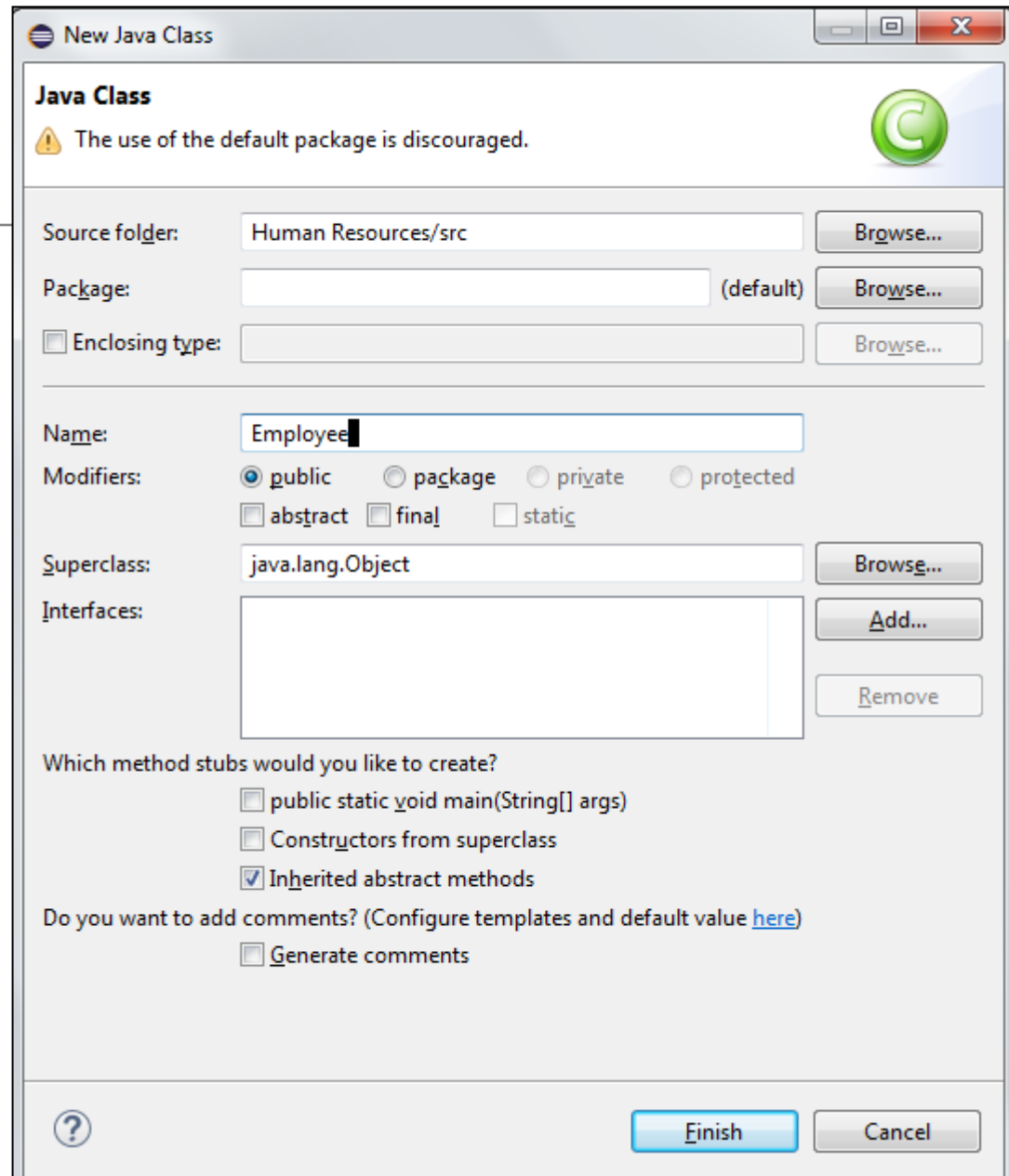


Right click on  
the **src** folder.

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

# New Java Class Wizard

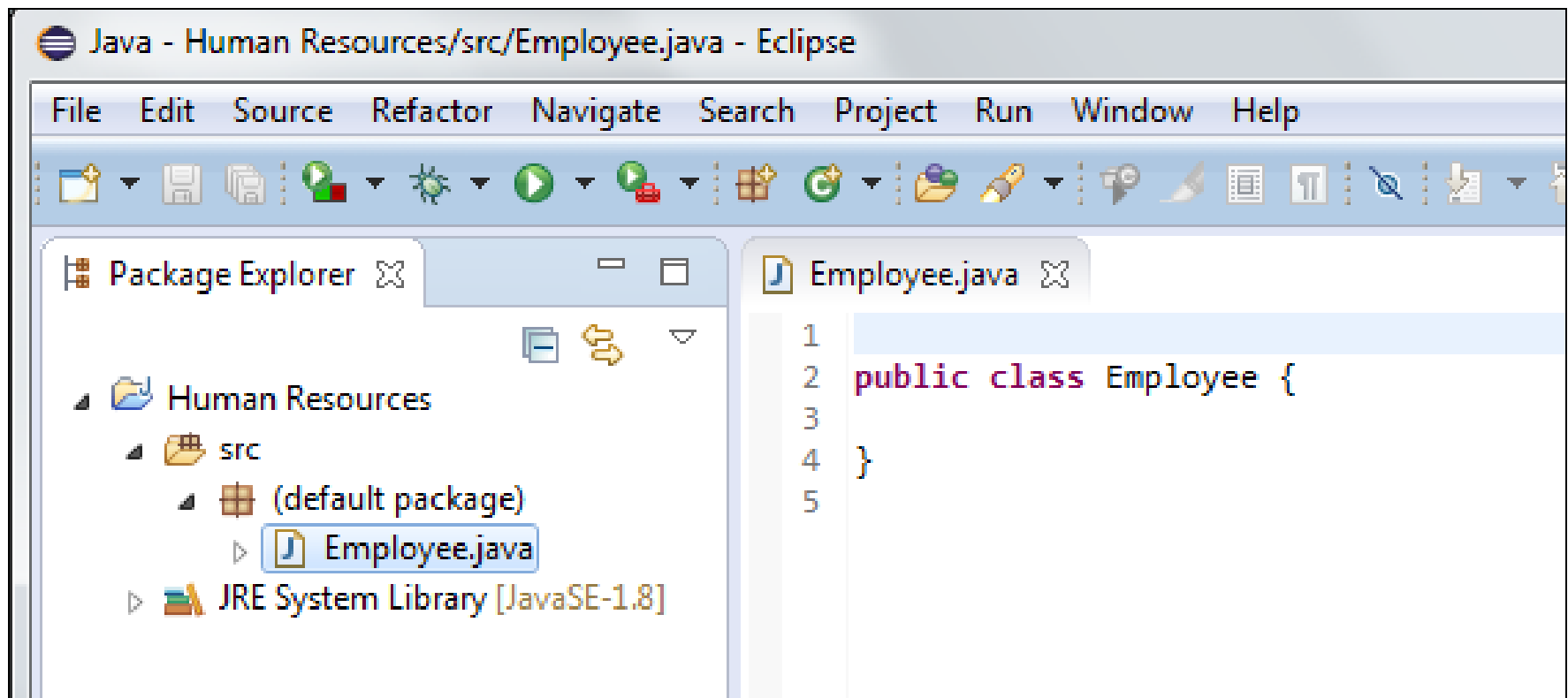
- Ensure the source folder and package are correct
- Enter the class name
- If your class will hold the main method, check the appropriate box to include it automatically.
- Click the Finish button when done.



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

# Viewing the New Class

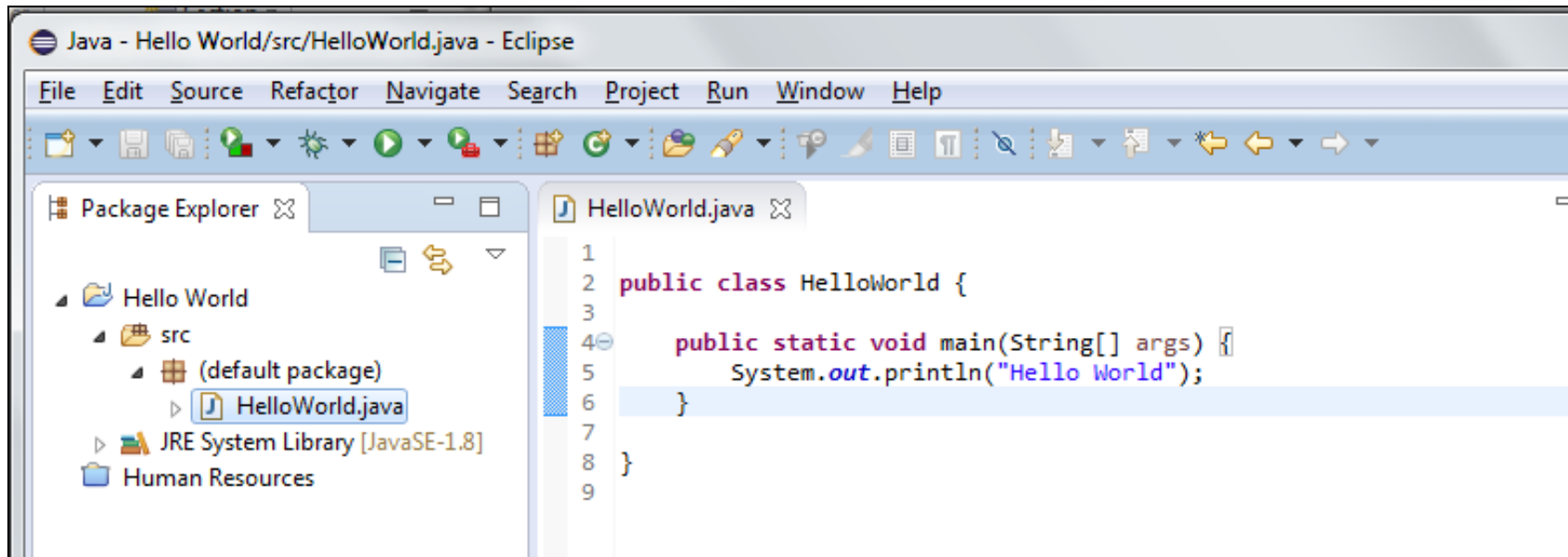
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# Running a Java Program (1)

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- We want to run the following code:



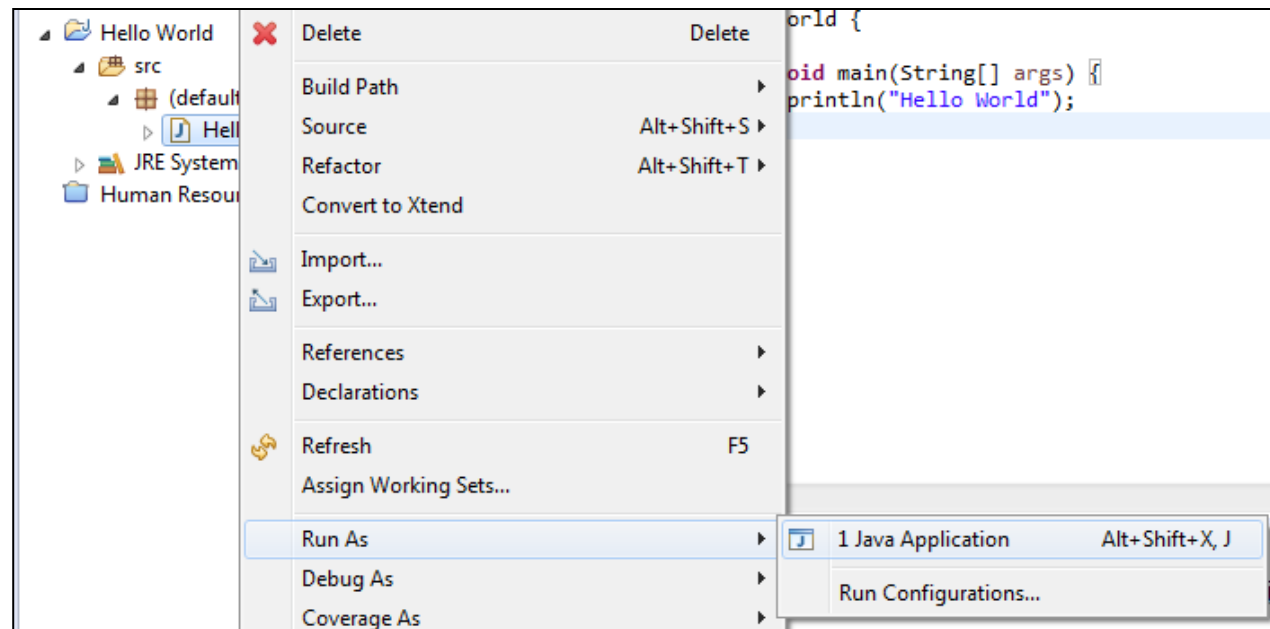
# Running a Java Program (2)

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

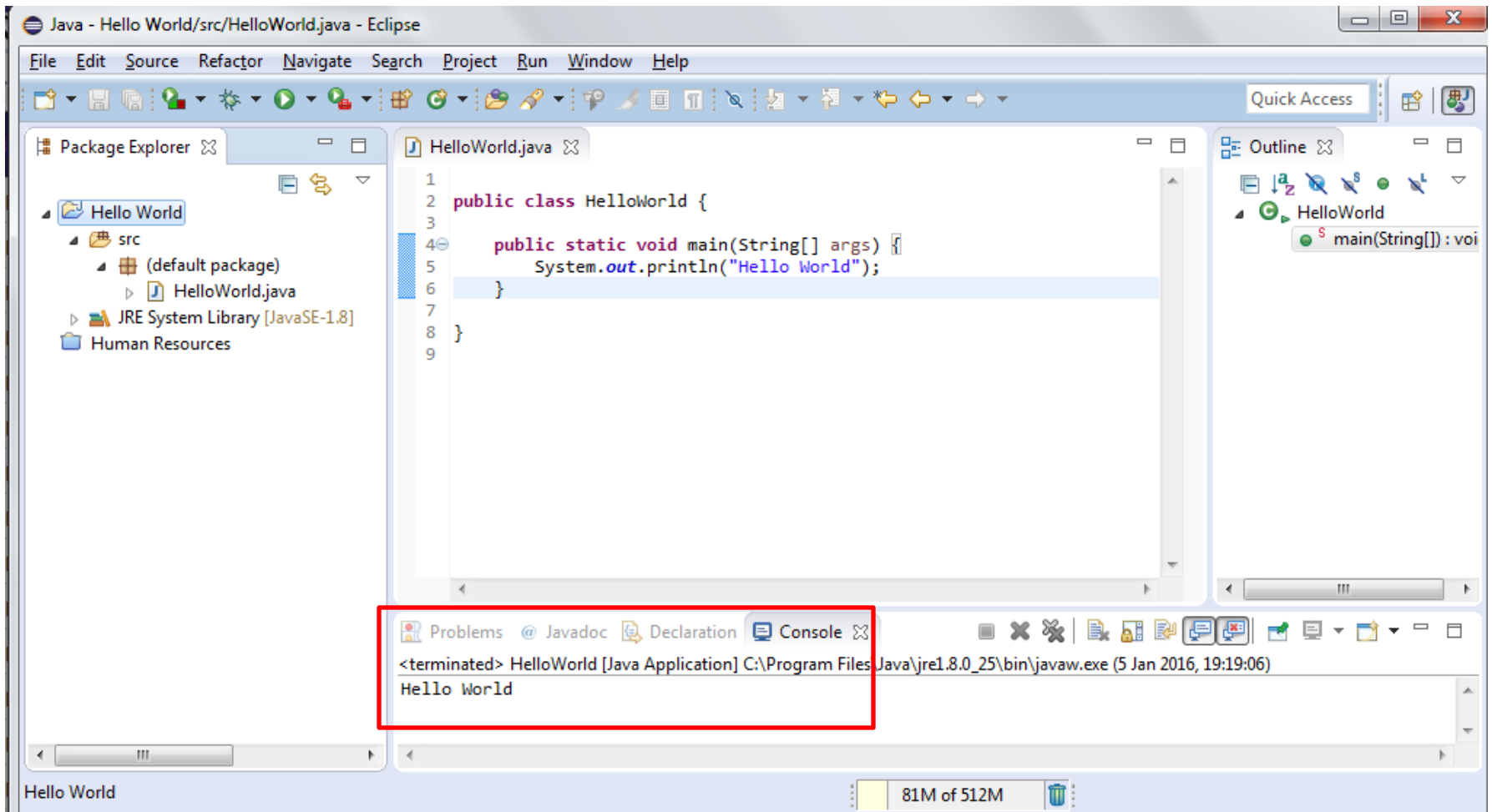
In the Package Explorer view:

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

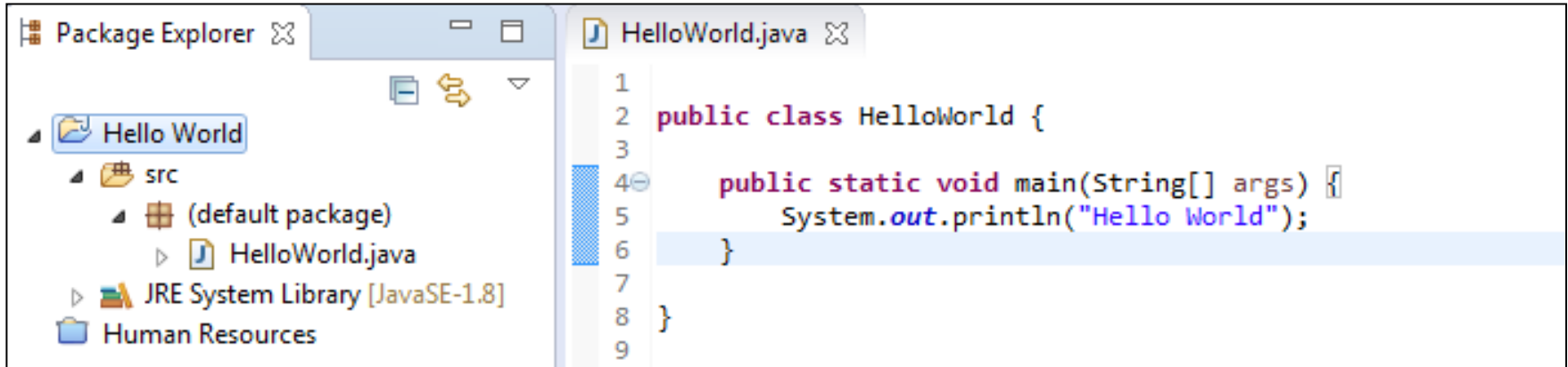
Select Run As > Java Application



# 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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