Java SE 8 Programming Language

Lab Guides

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Effective Date	**20/11/2012**

Hanoi, 06/2019

RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1	01/Jun/2018	Create new	Create a new Lab	DieuNT1	VinhNV
2	01/Jun/2019	Update	Apply fsoft template	DieuNT1	VinhNV

Contents

CODE:	JPL.S.L101
TYPE:	SHORT
LOC:	N/A
DURATION:	30 MINUTES

Unit 1: Java Introduction

Objective: JPL-1

- Able to install the compilation, execution environment and write the first java program.
- Run an application based on Java technology from the command line

Lab Guide 1: Install Java and Eclipse IDE in Windows

Download Java SE Development Kit 8 or later.

Open following link on your browser:

https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

Java SE Development Kit 8u181

You must accept the Oracle Binary Code License Agreement for Java SE to download this software.

Tích chọn Accept License Agreement ⇨ ◉ Accept License Agreement ○ Decline License Agreement

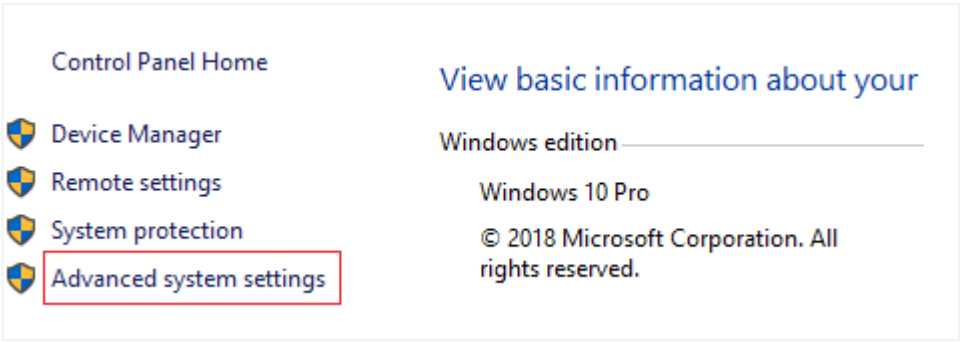
Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	72.95 MB	jdk-8u181-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	69.89 MB	jdk-8u181-linux-arm64-vfp-hflt.tar.gz
Linux x86	165.06 MB	jdk-8u181-linux-i586.rpm
Linux x86	179.87 MB	jdk-8u181-linux-i586.tar.gz
Linux x64	162.15 MB	jdk-8u181-linux-x64.rpm
Linux x64	177.05 MB	jdk-8u181-linux-x64.tar.gz
Mac OS X x64	242.83 MB	jdk-8u181-macosx-x64.dmg
Solaris SPARC 64-bit (SVR4 package)	133.17 MB	jdk-8u181-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	94.34 MB	jdk-8u181-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	133.83 MB	jdk-8u181-solaris-x64.tar.Z
Solaris x64	92.11 MB	jdk-8u181-solaris-x64.tar.gz
Windows x86	194.41 MB	jdk-8u181-windows-i586.exe
Windows x64	202.73 MB	jdk-8u181-windows-x64.exe

Chọn 1 trong 2 file tùy thuộc hệ điều hành của bạn ⇨

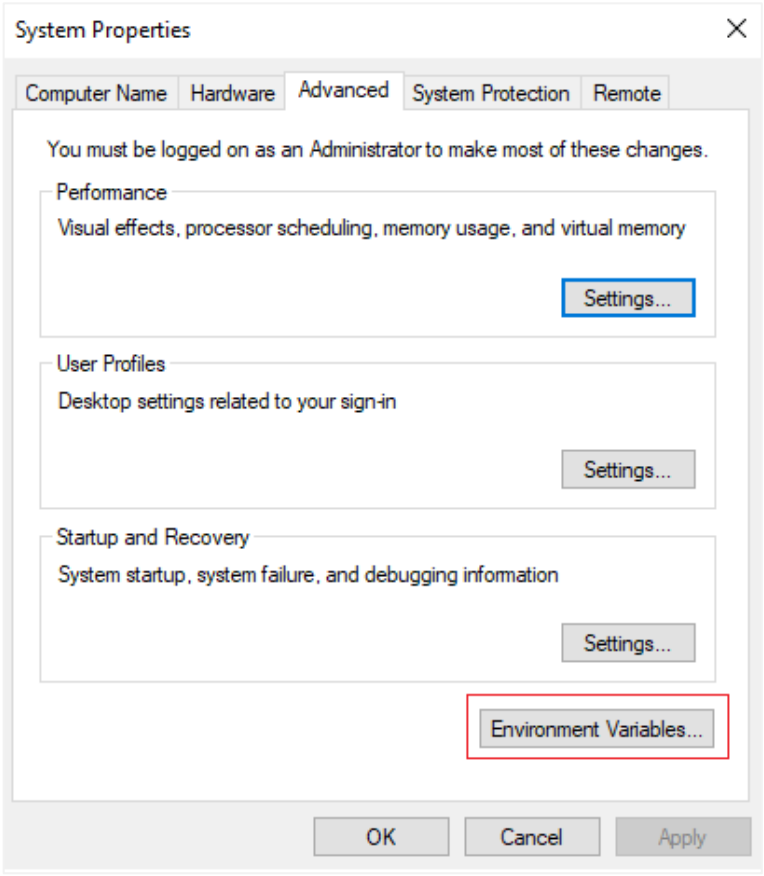
Window x64: dành cho win64
Windows x86: dành cho

1. Install environment variable.

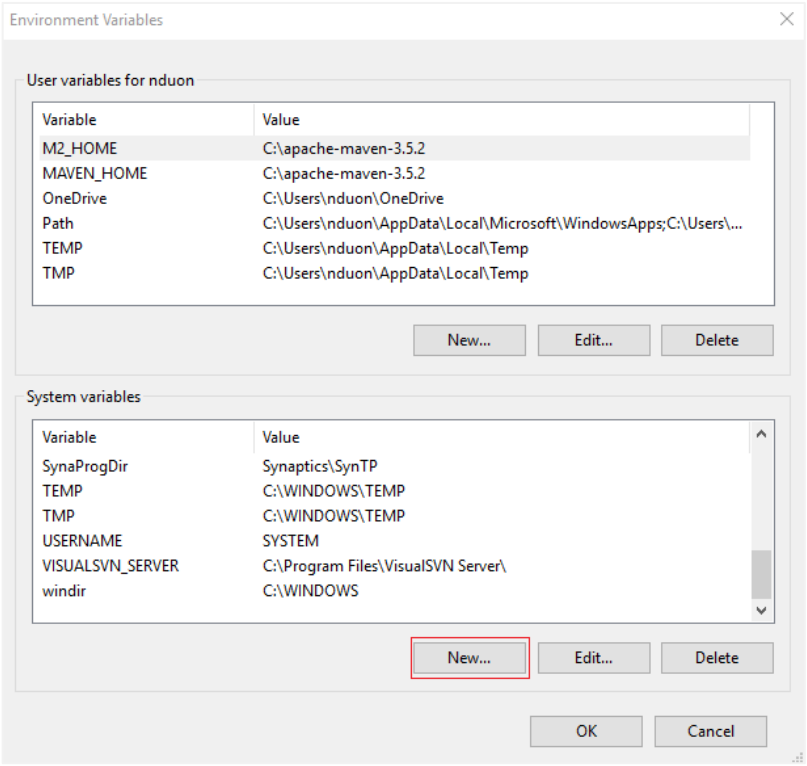
Right click on **This PC** | choose **Properties**.



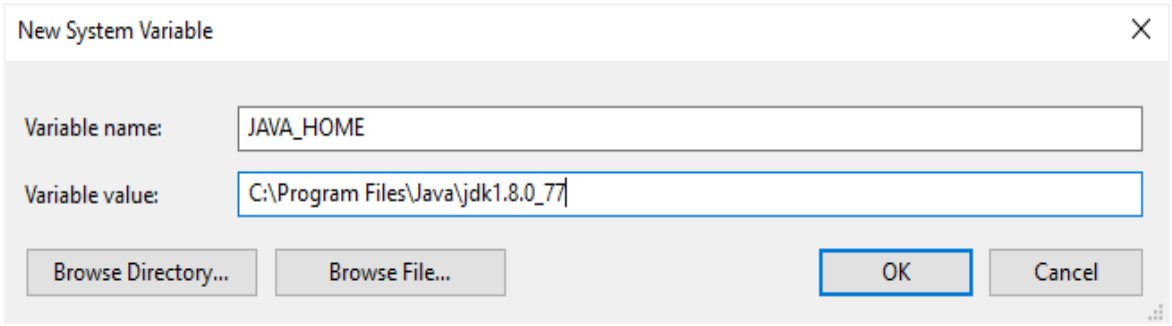
Choose “**Advanced system settings**”.



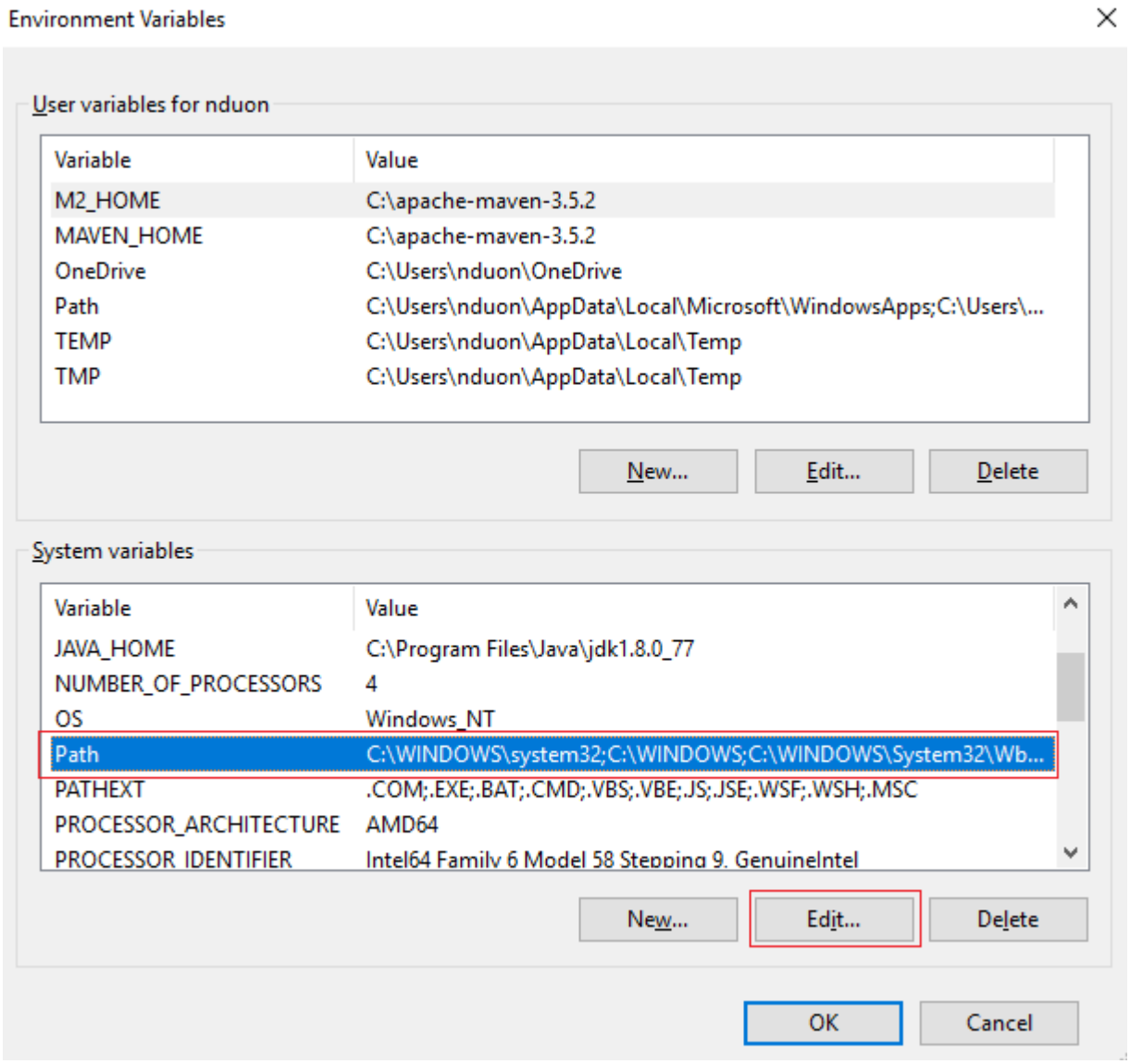
Choose “**Environment Variables**”.

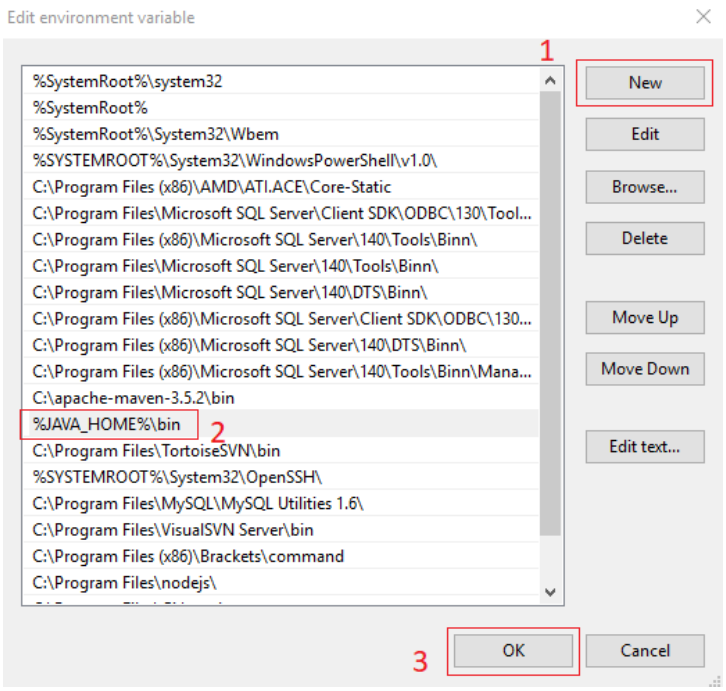


- In System variables form, choose **New**.
- Variable name: enter **JAVA_HOME**.
- Variable value: browse jdk folder that has been installed.

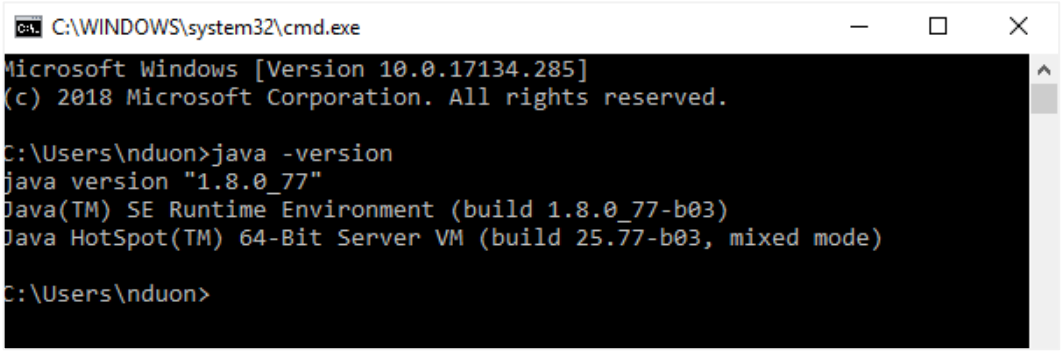


- Find Path variable, click it then choose "**Edit**" button.





To check if you do that exactly, open command line and type command: **java -version**



2. Install Eclipse IDE

Open following link on your browser:

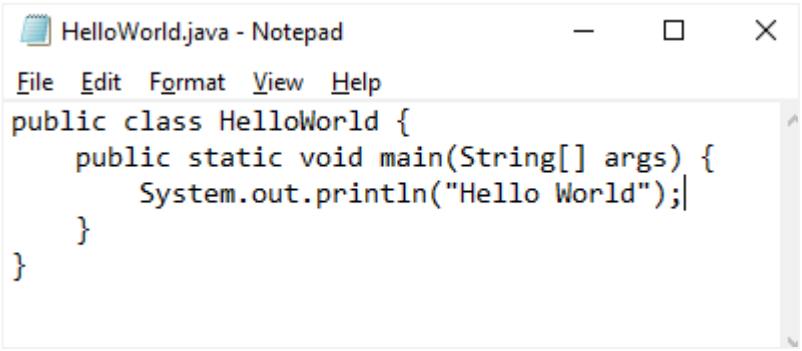
https://www.eclipse.org/downloads/packages/release/2018-09/r/eclipse-ide-java-ee-developers

Choose version to download.

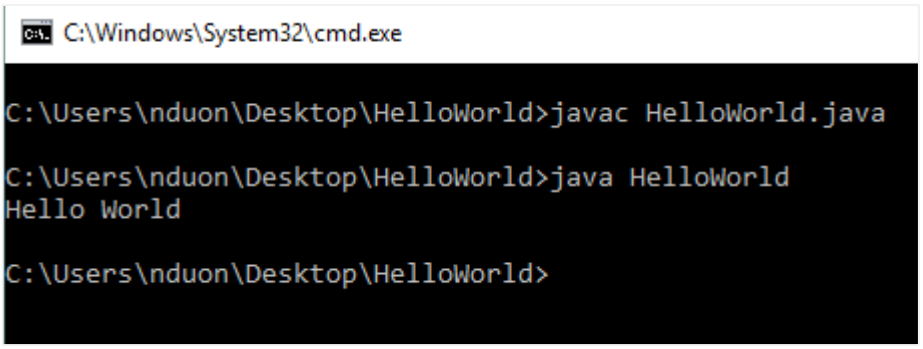
Lab Guide 2: Write first program: Hello World

On your desktop, you create a new folder named **HelloWorld.** In this folder, you need to create a new file named **HelloWorld.java.** You can open this file with any editor such as Notepad.

HelloWorld.java

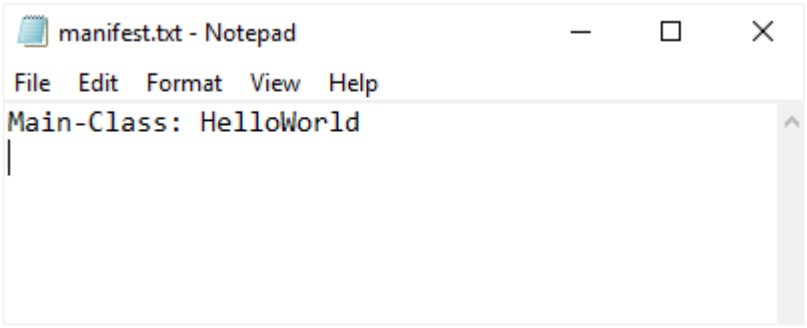


To run this file, open command line in **HelloWorld** folder, type commands:



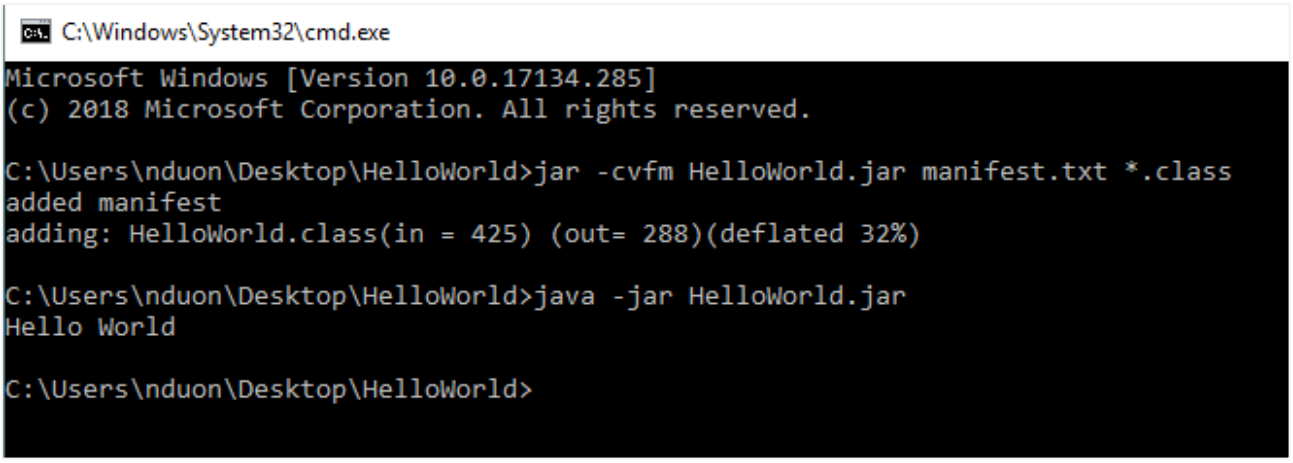
Lab Guide 3: Create jar file using command line

Create a new file named manifest.txt in **HelloWorld** folder.



Open command line in **HelloWorld** folder, type commands:

jar -cvfm HelloWorld.jar manifest.txt *.class

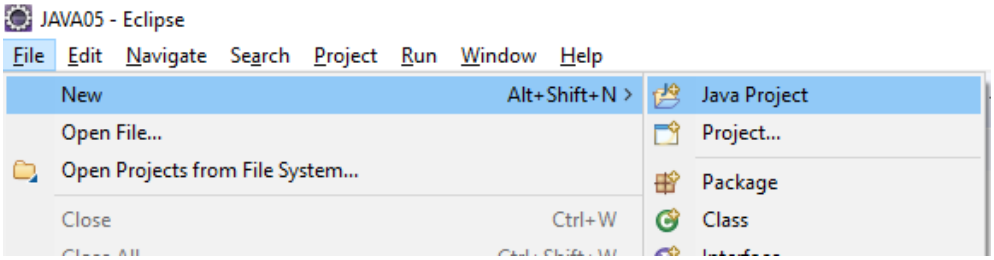


Lab Guide 4: HelloWorld in Eclipse IDE

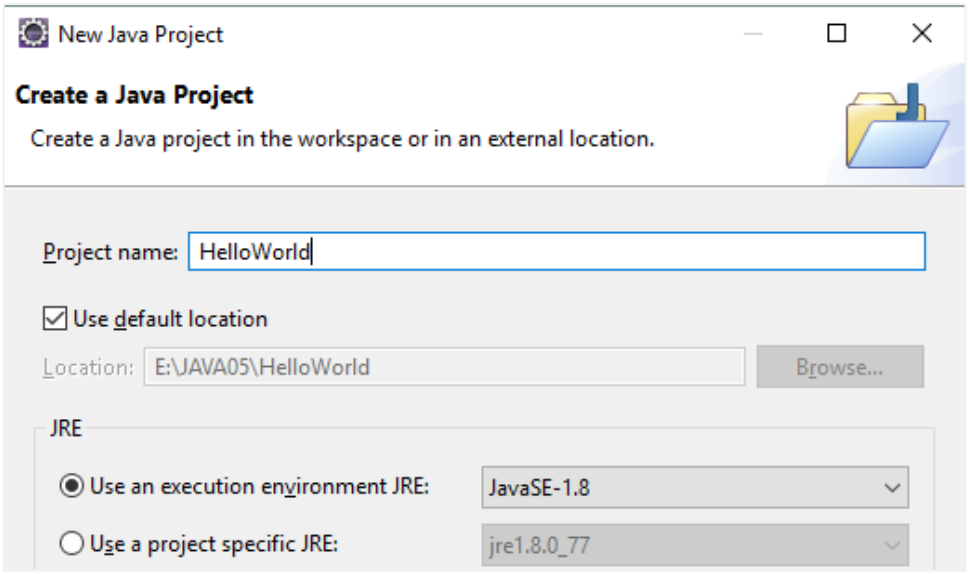
Open Eclipse IDE.

Create a Java Project:

Choose **File** | **New** | **Java Project** (if you don't see Java Project, you will choose Other and find Java Project)

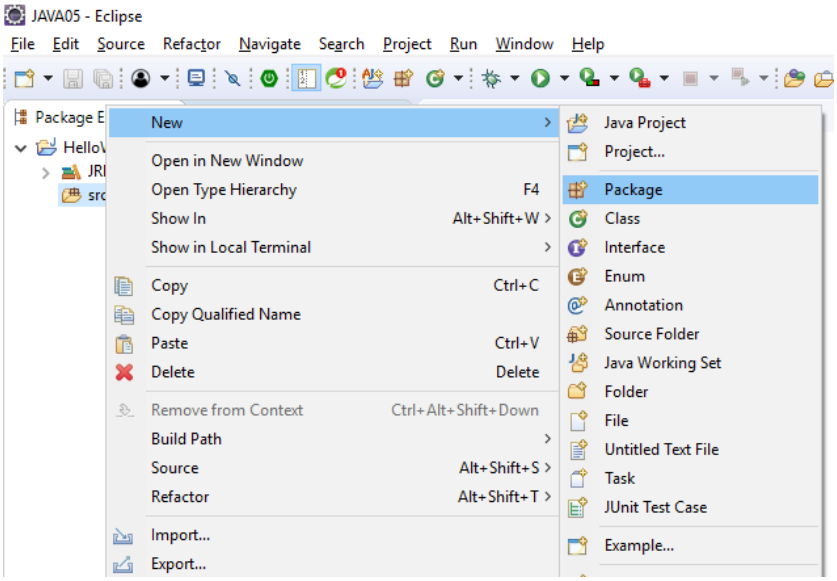


Enter project name: **HelloWorld**

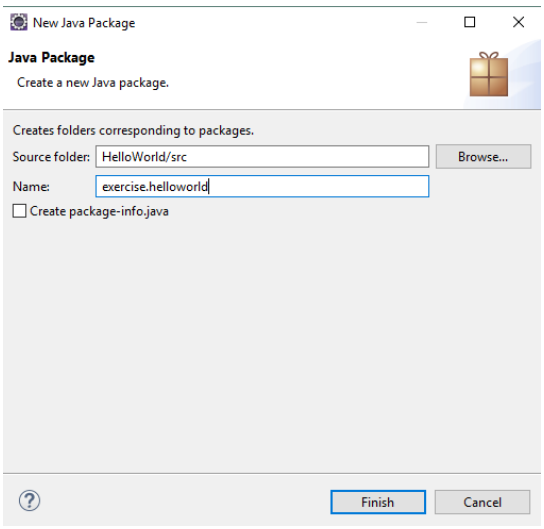


Create a new package:

Right click on **src** folder, choose **New** | **Package**.

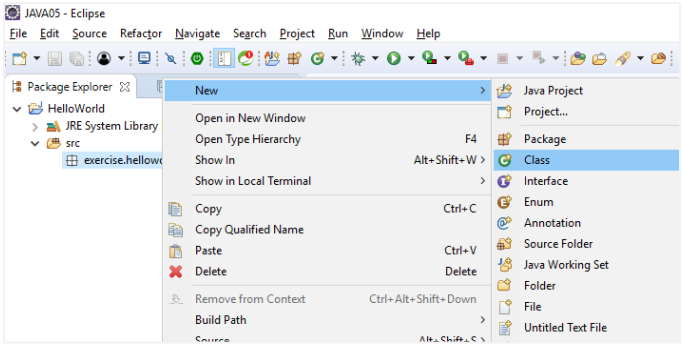


Enter package name:



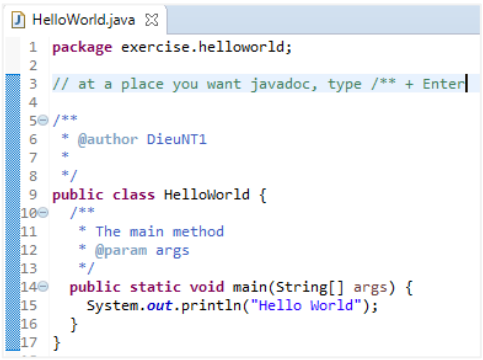
Create **HelloWorld** class:

Right click on package, choose **New** | **Class**.

- 

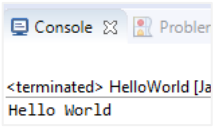
Enter **HelloWorld** on Name input.

- HelloWorld class



Right click on **HelloWorld**.java, choose **Run As** | **Java Application**

Result:



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