

PGCert IT: Programming for Industry

Introduction to Java – Model answers for Exercise One ~ Three

Exercise One: Create My First Java Program using IntelliJ

Questions:

1. What does this class do?

Prints out the message "Hello World" to the console.

2. Where are the classes generated and stored by IntelliJ?

By default, in the out folder.

3. Where do you see the messages after running the program in IntelliJ?

The console window at the bottom of IntelliJ.

4. What are the different ways of running this class in IntelliJ?

Click on the green arrows at the Class header or at the main method. Or, right click on the MyFirstPorgram.java file at the Project tool window and select "Run"

5. What are some of the useful shortcut keys you found in IntelliJ?

See https://resources.jetbrains.com/storage/products/intellij-idea/docs/IntelliJIDEA ReferenceCard.pdf

Exercise Two: Add a New Class to an existing project

Questions:

1. What happened to MySecondProgram class after you have fixed the error?

Prints out the message "Hello World" to the console.

2. What are packages used for?

Packages are organised in a hierarchical structure, much like ordinary directories.

Questions:

1. What does the keyword import do in Java?

The import keyword is used to import a package, class or interface.

2. How would you resolve the compilation error without using the import keyword?

Make the two classes MyFirstProgram and MySecondProgram in the same package.

Exercise Three: Evaluation of Expressions

What output do you think would be produced by each of the following code fragments? (You can work on this exercise on paper)

```
System.out.println((int)2.9 * 4.5);
9.0
System.out.println(Math.max(5,60) % Math.min(12,7));
4
System.out.println(0.2 * 3 / 2 + 3 / 2 * 3.2);
3.5
```