Java SE

JAVA8 EXERCISE BOOK

Prepared by

Team QAC - Trainers

📞 +44161 393 2271

✉ Team.QAC.All.Trainers@qa.com

Contents

Exercise 1 – HelloWorld

Create:

- Create new a new Maven Project: HelloWorld

Code a project that:

- Outputs "HelloWorld" to the console.

- Return "HelloWorld" as a String.

- Has a method that takes a String parameter and outputs this to the console.

Exercise 2 – Calculator

Create:

- Create new a new Maven Project: Calculator

Code a project that:

- Has a method that takes 2 Integer Inputs, adds them together, and returns the result.

- Create 3 more methods that do the same but with multiplication, division and subtraction.

Exercise 3 – CheckString

Create:

- Create new a new Maven Project: CheckString

Code a project that:

- Has a method that when given a String, checks that it matches a hard-coded String.

- Has a method that when given 2 Strings, compares the Strings and checks if they are equal.

Exercise 4 – Calculator Continued

Return to your Calculator project you created earlier.

Code a project that:

- Combines the 4 methods from earlier into one method that takes 3 parameters, the third parameter represents which arithmetic operation you need to perform.

Exercise 5 – Print Numbers

Create:

- Create new a new Maven Project: Iteration

Code a project that:

- Has a method that prints out the numbers between 1 and 10

- Has a method that prints out the numbers between 100 and 999

- Has a method that prints out the numbers between 1 and 10 in words.

- As above but the numbers 1 and 100.

- As above but the numbers 1 and 1000.

Exercise 6 – Collections

Create:

- Create new a new Maven Project: Collections

Code a project that:

- Has a method that iterates through the numbers 1 to 100 and adds them into an Array.

- Has a method that iterates through the number 100 to 999 and adds them into a List.

- Has a method that iterates through your List from above and multiply each number by 10.

Exercise 7 – Streams

Create:

- Create new a new Maven Project: Streams

Code a project that:

- Has a method that completes Exercise 6 but using Streams.

Exercise 8 – HelloWorld with Lambdas

Return to your HelloWorld Project you created earlier.

Code a project that:

- Achieved the final functionality of Exercise 1, but using the Consumer Interface and Lambdas.

Exercise 9 – CheckString with Lambdas

Return to your CheckString Project you created earlier.

Code a project that:

- Achieved the final functionality of Exercise 3, but using the BiPredicate Interface and Lambdas.

Exercise 10 – Calculator with Lambdas

Return to your Calculator Project you created earlier.

Code a project that:

- Achieved the final functionality of Exercise 4, but using the Bi Function Interface and Lambdas.