

COMP1331 – JAVA 1
Assignment 1

Objectives:

1. To understand basic problem solving techniques using Java Programming Language.
2. To declare Java primitive data types. In addition, to obtain input and display output.
3. To be able to use arithmetic and use different control structures (Decision making and Loops)
4. To create methods, invoke methods, and pass arguments to a method

Specification

Use Java Development Kit (JDK) to do the following.

What to hand in:

A softcopy of the (well-structured, **well-commented**) JAVA code you wrote should be submitted on Ritaj on a message called Assignment_one (Weaving.java)

Deadline: Saturday 30/07/2022 11:59pm.

Task

(Weaving Numbers)

Write a program that lets the user to enter any two integers and weave them digit by digit and print the result of weaving their digits together to form a single number. Two numbers x and y are weaved together as follows. The last pair of digits in the result should be the last digit of x followed by the last digit of y. The second-to-the-last pair of digits in the result should be the second-to-the-last digit of x followed by the second-to-the-last digit of y. And so on.

You should write weaveNumber method that works as following examples weaveNumber(271 ,389).should return 237819. If one of the numbers has more digits than the other, you should imagine that leading zeros are used to make the numbers of equal length. For example, weaveNumber(2384, 12) should return 20308142 (as if it were a call on weaveNumber(2384, 0012)). Similarly, weaveNumber(9, 318) should return 30198 (as if it were a call on weaveNumber(009, 318)).

Notice: you are not allowed to use any of ready methods such as Math.pow... etc.