



Java Basics

Training Assignments

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RECORD OF CHANGES

No	Effective Date	Change Description	Reason	Reviewer	Approver
1	26/Apr/2020	Create a new short Assignment	Create new	DieuNT1	VinhNV

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CODE:	JPE.S.A101
TYPE:	SHORT
LOC:	70
DURATION:	60 MINUTES

Assignment_01

Objective:

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

Exercise 1

Write a Java program, called **ArithmeticExercise1** to print the result of the following operations.

Test Data:

- a. $-5 + 8 * 6$
- b. $(55+9) \% 9$
- c. $20 + -3*5 / 8$
- d. $5 + 15 / 3 * 2 - 8 \% 3$

Expected Output :

43
1
19
13

Exercise 2

Write a Java program, called **ArithmeticExercise2** to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Test Data:

Input first number: 125
Input second number: 24

Expected Output:

$125 + 24 = 149$
 $125 - 24 = 101$
 $125 \times 24 = 3000$
 $125 / 24 = 5$
 $125 \% 24 = 5$

Exercise 3

Write a Java program, called **JavaExercise** to display the following pattern.

Sample Pattern:

```
J  a  v   v  a
J  a a  v   v  a a
J J  aaaaa  V V  aaaaa
JJ a   a  V a   a
```

Exercise 4

Write a Java program, called **ArithmeticExercise3** to compute the specified expressions and print the output.

Test Data:

$((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5))$

Expected Output

2.138888888888889

Exercise 5

Write a Java program, called **CircleExercise** to enter radius of a circle and print the area, perimeter of this circle.

Test Data:

Radius = 7.5

Expected Output

Perimeter is = 47.12388980384689

Area is = 176.71458676442586

Exercise 6

Write a Java program, called **RectangleExercise** to enter the width and height of a rectangle and print the area and perimeter of this rectangle.

Test Data:

Width = 5.5 Height = 8.5

Expected Output:

Area is $5.6 * 8.5 = 47.60$

Perimeter is $2 * (5.6 + 8.5) = 28.20$

Exercise 7

Write a Java program, called **LogicalExercise** to compare two numbers.

Input Data:

Input first integer: 25

Input second integer: 39

Expected Output:

25 != 39

25 < 39

25 <= 39

Problem Descriptions:

- » Write a java console program to resolve this assignment

Guidelines:

- » Create a project named **Java.S.A101**, create package ***fa.training.assignment1*** that contains the above classes.

-- THE END --