

***Java Basics***

**Training Assignment**

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| Document Code | 25e-BM/HR/HDCV/FSOFT |
| Version | 1.1 |
| Effective Date | 20/05/2019 |

**Hanoi, 05/2020**

RECORD OF CHANGES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Effective Date | Change Description | Reason | Reviewer | Approver |
|  | 20/May/2020 | Createw a new assignment | Create new | DieuNT1 | VinhNV |
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|  | **CODE: Assignment01\_Opt1**  **TYPE: Long**  **LOC: N/A**  **DURATION: 90 MINUTES** |

# Java Flow Control

Objective

* Java if...else, Java switch Statement, Java for Loop, Java for-each Loop, Java while Loop, Java break Statement, Java continue Statement

Business needs

* TBD

Working requirements

* Working environment: Eclipse IDE.
* Delivery: Source code, deployment and testing, reviewing evident packaged in a compress archive.

Product architecture

* N/A

Technologies

The product implements one or more technology:

* Java basics
* Java flow control

Stored Data

* N/A

Exercise 1:

Write a Java program that reads a floating-point number and prints "zero" if the number is zero. Otherwise, print "positive" or "negative". Add "small" if the absolute value of the number is less than 1, or "large" if it exceeds 1,000,000.

Test Data

Input a number: 25

Expected Output :

Input value: 25

Positive number

Exercise 2:

Write a program in Java to display the cube of the number upto given an integer.

Test Data

Input number of terms : 4

Expected Output :

Number is : 1 and cube of 1 is : 1

Number is : 2 and cube of 2 is : 8

Number is : 3 and cube of 3 is : 27

Number is : 4 and cube of 4 is : 64

Exercise 3:

Write a program in Java to make such a pattern like right angle triangle with a number which will repeat a number in a row.The pattern is as follows :

1

22

333

4444

Exercise 4:

Write a program to print out all Armstrong numbers between 1 and 500. If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number.

For example, 153 = ( 1 \* 1 \* 1 ) + ( 5 \* 5 \* 5 ) + ( 3 \* 3 \* 3 )

Exercise 5:

Compute the natural logarithm of 2, by adding up to n terms in the series

1 - 1/2 + 1/3 - 1/4 + 1/5 -... 1/n

where n is a positive integer and input by user.

**-- THE END --**