

Laboratory 1. Setting Up IDE and Writing a Simple Java Program

(Due: 3/04, Fri, 5pm)

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1. Setup a Java development environment.

Setup a Java development environment which includes a Java development kit (JDK).

Install an integrated development environment (IDE) for Java. An IDE is a software application that provides comprehensive facilities to computer programmers for software development. An IDE normally consists of at least a source code editor, build automation tools and a debugger.

2. Write a Java program that prints a series of Fibonacci numbers.

- ❑ The program asks the user to enter 'n', the number of Fibonacci numbers to print. Then, the program generates the sequence of 'n' Fibonacci numbers and computes the sum of all the numbers. The program prints the 'n' number of Fibonacci numbers and its sum.

- ❑ Fibonacci Number

Fibonacci numbers, commonly denoted F_n , form a sequence such that each number is the sum of the two preceding ones, starting from 0 and 1. Let $F_1 = 0$ and $F_2 = 1$.

For a Fibonacci number F_n ,

$$F_n = F_{n-1} + F_{n-2}$$

- ❑ Example

Enter the number of Fibonacci numbers to print: 10

Here is the sequence of first 10 Fibonacci numbers:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34

The sum of the numbers is 88.

3. Submission Guidelines

- ❑ Submit your solution on the web site; *myclass.ssu.ac.kr*
- ❑ Submit just **1 PDF file** containing the followings;
 - Java Source Code, *.java* file
 - Screenshot showing the program output
- ❑ Use this filename convention for your submission; **OOP.LAB.##.홍길동.pdf**, where ## is the laboratory number in 2 digits.
For example, the lab. #7 will have the following name; **OOP.LAB.07.홍길동.pdf**.
- ❑ No Plagiarism
 - The laboratory is an individual exercise. Do not copy others.
 - Submit your original work.

4. Grading Criteria (Total of 10 Points)

- ❑ Quality of Program (6)
 - Program Structure (4)
 - Exception Handling (1)
 - Program Comments/Annotation (1)
- ❑ Accuracy of Output (4)
 - Correctness of Output Values (3)
 - Comprehensive Output Format (1)