Platform-based Programming

#1   Java Basics
1) class and main
2) method definition and invocation
3) System.out.println

2019년 2학기

Problem

❖ Write a Java program that prints factorials from 1 to the given number.

❖ The program should look like this!

> Enter a number: *10*
> Factorial of 1 = 1
> Factorial of 2 = 2
> Factorial of 3 = 6
> Factorial of 4 = 24
> …
> Factorial of 10 = 3628800

❖ Constraints
  ❖ You should define separate methods for computing factorial; The name should be getFactorial.
  ❖ The main method should invoke it instead of computing factorials directly.

Code Skeleton

❖ File name: FactorialMain.java

```java
import java.util.Scanner;
public class FactorialMain {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        final int number = scanner.nextInt();

        for ( int i = 1; i <= number; i ++ ) {
            …
        }
        scanner.close();
    }
    private static long getFactorial(final int number) {
        …
    }
}
```