

COMP 110 Introduction to Programming, Summer II, 2008
Recitation on Method, Jul 16, 2008
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I.

```
public class HelloMethod
{
    public static void main(String[] args)
    {
        System.out.println("Hello Java");

        MyStaticMethod(); // Call MyStaticMethod once
        MyStaticMethod(); // Call MyStaticMethod twice
        MyStaticMethod(); // Call MyStaticMethod another time
    }

    public static void MyStaticMethod()
    {
        System.out.println("MyStaticMethod is called");
    }
}
```

1. Predicate the output of this program
2. What is the flow of execution of this program?
3. Try this program in your computer. What is the output?
4. Using the Debug tool in Java to walk through the program and verify the execution flow by yourself.

II. Write a program to prompt the user to input an integer N, the program outputs the square of N. For example, if the user enters 3, the output is 9. You must **write** and **use** a method **Square** in this exercise:

- The method takes one parameter which is int.
- This method is a value-returning method. It returns the square of value. Therefore, the data type of the return value is also int.

III. Write a program to prompt the user to input a string (use `console.next()`), the program outputs each character in the string twice. For example, if the user enters `abc`, the output should be `aabbcc`. Debug your program use the debugging tool.

Hint:

- **Write a method Repeat.** The method takes one parameter which is `char`.
- This method is a void method. It returns no value. But it prints two times of the input `char`.

IV. Modify your program in III so that it prompts the user to input a string and an integer number, the program outputs each character in the string `N` times. For example, if the user enters `abc` and `3`, the output should be `aaabbbccc`. If the user enters `abc` and `4`, the output should be `aaaabbbbcccc`. Debug your program use the debugging tool.

Hint:

- **Write a method RepeatNTimes.** The method takes two parameters: a `char` and an integer
- This method is a void method. It returns no value. But it prints `N` times of the input `char`. Use the loop to print the `char` `N` times.