

Philip Pesic

Week 14

April 23 2023

Week 14 Prog 4

For example 2, write a non recursive version of this function... using a regular loop.

```
package Prog4;

class prog4 {
    public static void main(String[] args) {
        int factorial = 1;
        for (int i = 7; i > 0; i--) {
            factorial *= i;
        }

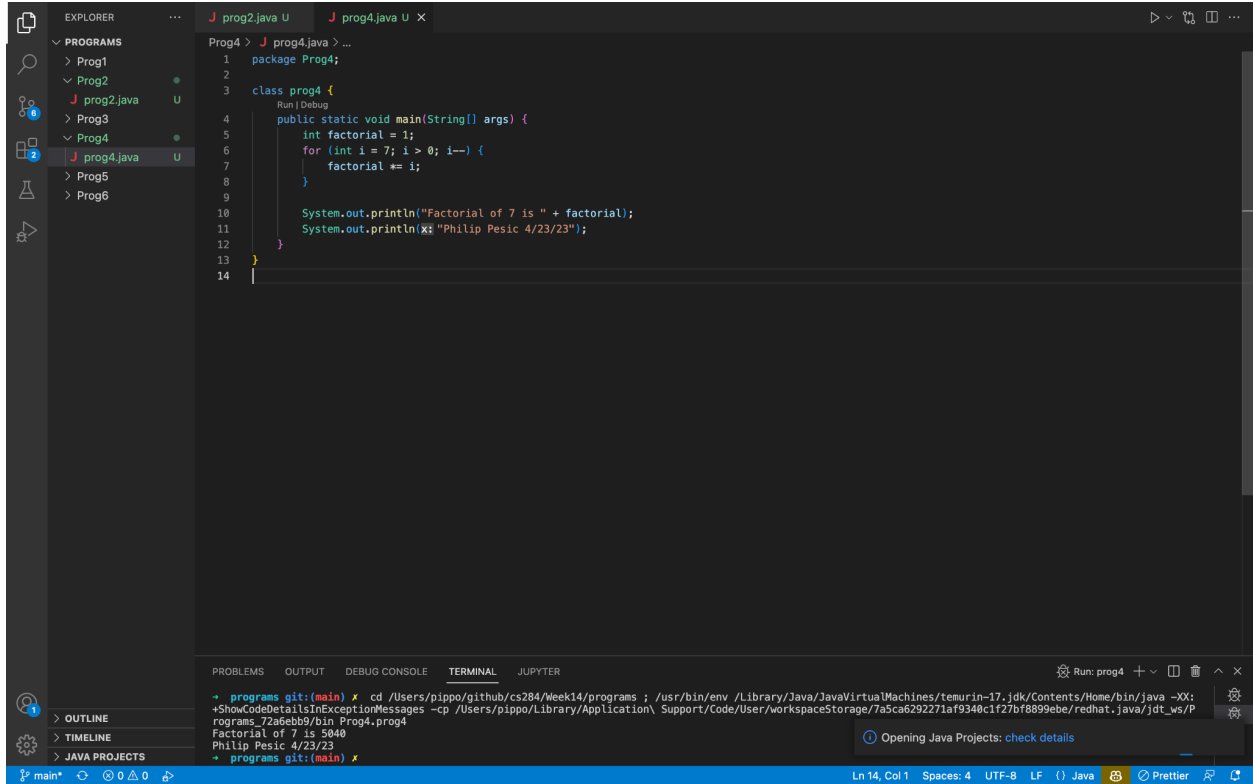
        System.out.println("Factorial of 7 is " + factorial);
        System.out.println("Philip Pesic 4/23/23");
    }
}
```

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The screenshot shows an IDE with a file explorer on the left containing a directory structure with programs Prog1 through Prog6. The main editor displays a Java file named prog4.java with the following code:

```
1 package Prog4;
2
3 class prog4 {
4
5     public static void main(String[] args) {
6         int factorial = 1;
7         for (int i = 7; i > 0; i--) {
8             factorial *= i;
9         }
10
11         System.out.println("Factorial of 7 is " + factorial);
12         System.out.println("Philip Pesic 4/23/23");
13     }
14 }
```

The bottom of the IDE features a terminal window with the following output:

```
+ programs git:(main) x cd /Users/pippo/github/cs284/week14/programs ; /usr/bin/env /Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -XX:
+ShowCodeDetailsInExceptionMessages -cp /Users/pippo/Library/Application\ Support/Code/User/workspaceStorage/7a5ca62927271af9348c1f27bf8899ebe/redhat.java/jdt_ws/P
rograms_72a6ebb9/bin Prog4.prog4
Factorial of 7 is 5040
Philip Pesic 4/23/23
+ programs git:(main) x
```

The status bar at the bottom indicates the current position is Ln 14, Col 1, with 4 spaces, UTF-8 encoding, LF line endings, and the Java language.

I practiced replacing recursion with loops