

ITSE 2321 – OBJECT-ORIENTED PROGRAMMING (JAVA)

Program 7 – Files, Streams, and Methods

The trustees of a small college are considering voting for a pay raise for their faculty members. They want to grant a 4 percent raise for those earning more than \$70,000.00, a 7 percent raise for those earning more than \$50,000.00 up to \$70,000.00 and 5.5 percent raise for all others. However, before doing so, they want to know how much this will cost.

Use the template, **Program7-Template.java**, provided to write a program that will print the faculty number, the old salary, the raise percentage, the pay raise, and the new salary for each faculty member in **a five-column format with headings**. Also print the total amount of the raises, the average of the raises, and the total and average of the faculty payroll before and after the raise. Use the end of file as a sentinel value. The input data is available in **Program7.txt**.

Download the attached file, **Program7-template.java**, from Blackboard and rename it as **Program7.java**.

Do NOT use any binary logical operator or anything that looks like one in the program. You will not receive full credit for the program if you do.

No input, processing or output should happen in the main method. All work should be delegated to other non-static methods. The program should have at least **4 non-static methods** (main and developerInfo not included) and the output sent to an output file, **Program7-output.txt**

Every method in your program should be limited to performing a single, well-defined task, and the name of the method should express that task effectively.

All classes in this program must be public, non-static and not nested in other classes.

Compile your program and correct all syntax errors and warnings. **You will not receive credit for the program if it does not compile successfully.**

Don't forget to include lines 1 through 35 (line 21 must reflect your controlling/main class) and the developerInfo method and comments of Program1-Template.java. You will not get full credit if some of the lines are missing.

Create a folder named, **<YourLastNameFirstName>_Program7**. Copy your source code and the output file to the folder. Zip the folder, as a **“.zip”** file, and upload it to Blackboard.

Before you upload your program to Blackboard:

- Ensure that your code conforms to the style expectations set out in class and briefly discussed below.

- Make sure your variable names and methods are descriptive and follow standard capitalization conventions.
- Put comments wherever necessary. Comments at the top of each module should include your name, file name, and a description of the module. Comments at the beginning of methods describe what the method does, what the parameters are, and what the return value is. See the **Program1-Template.java** for more details.
- *Program readability and elegance are as important as correctness.* After you have written your method, read and re-read it to eliminate any redundant lines of code, and to make sure variables and methods names are intuitive and relevant.

Read the assignment very carefully to ensure that you have followed all instructions and satisfied all requirements. **You will not get full credit for this program if it is not written as instructed even if it works as expected.**