

HOMEWORK 3 - SPRING 2025

HOMEWORK 3 - GRADING KEY

1. (17 points) Documentation and coding style:

- Name, ID number and recitation at the top of ALL java files [2 points]
- Precise and correct specifications [5 points]
- Indentation [3 points]
- Variable names [2 points]
- Javadoc Style documentation *(see NOTE). [5 points]

NOTE 1: You only need to submit your .java files. We will use the javadoc *.java command to create the javadoc files.

NOTE 2: YOUR ASSIGNMENT WILL NOT BE GRADED if you submit only *.class files.

2. (20 points) Source code:

- Implementation done as specified (additional methods are OK). [8 points]
- Coding style: flexible, extensible, good use of methods and avoid duplicate code. [4 points]
- Throw an exception back to the calling method if a precondition is violated. [3 points]
- Implement Stack class or use the Java Stack class correctly, not calling any Vector methods that were inherited, but not listed in the Stack API (using clone is OK). [5 points]

3. (63 points) Program correctness:

- Programs compiles without any errors. [15 points]
- Menu operations work correctly:
 - A Add New Equation [4 points]
 - F Change Equation in History [6 points]
 - B Print Previous Equation [2 points]
 - P Print full history [3 points]
 - U Undo last equation [3 points]
 - R Redo equation [3 points]
 - C Reset calculator [1 point]
 - Q Quit [1 point]
- Correctness:
 - Pre-fix calculations are correct [5 points]
 - Post-fix calculations are correct [5 points]
 - In-fix calculations are correct [5 points]
 - Binary representations are correct [5 points]
 - Hexadecimal representations are correct [5 points]