ASSIGNMENT 1B

Assignment 1B tests your knowledge of List, Stacks, Queues, and Priority Queues (Chapter 20).

Part 1. Design a driver class called **YourName** Assignment1B (replace YourName with your actual name) with the following exact methods (exact names, spelling, caps, parameters, returned values, functionality) in this order (do not merge the steps):

- 1. Read words from the **Assingment1BData.txt** file. In the file, the words are delimited by whitespaces, punctuation marks (comma, period, colon, semi-colon, exclamation mark, question mark, etc.), quotation marks, parentheses, and other symbols . Do not use as delimiter symbols like plus, hashtag, hyphen, or other characters that can be part of words/concepts (e.g. C++, C#, Objective-C, etc). If you are going to read an entire line, you are going to need to split it to extract the words.
- 2. Add the words you read from the file into an ArrayList, LinkedList, Stack, or Queue, or PriorityQueue data structure called **YourNameStructure**. You can use any type of lists, queues, or stacks introduced in Chapter 20. Use your knowledge of the chapter 20 and problem at hand to decide which type is better for this particular problem. Do NOT use sets, maps, or any other types of data structures. Do not add any empty strings to your structure.
- 3. Print all the words from the YourNameStructure in alphabetical order, one word per line.

Part 2. Implement the class in NetBeans IDE and JAVA: Create a JAVA project called *YourNameAssignment1B* (same name as the driver class) and add your code to *YourNameAssignmen1B* project/driver class. Your program should be user-friendly (prompt the user for the input using a descriptive message) and be well-documented/commented (have comments for every line of code).

Part 3. Create the screenshot document for your code and output: Create a Microsoft Word document from the <u>YourName-Assignment1B.docx</u> template and call it <u>YourName-Assignment1B.docx</u> (replace <u>YourName</u> with your actual name) Add to the document your complete screenshots of the NetBeans editor window showing the complete JAVA source code for <u>YourNameAssignment1</u> class and complete screenshots the complete output. If the entire class JAVA source code or the output does not fit in one screenshot or the screenshots cannot be easily read, create multiple screenshots and add multiple screenshots to the screenshot document. Please keep the screenshots in order (look at the line numbers). If your output is longer than a line and does not fit on one screen, Wrap Text in your output panel. See the instructions on how to use the template.

Part 4. Submit your work: Submit **YourName-Assignment1B.docx** on eCampus under the **Assignment 1B.** Do not archive the files (e.g. no RAR, ZIP, etc.) or submit other types/formats of files (e.g. no CLASS, PDF, JAVA, etc.). Please take time after submitting to review the file and check it is correct and resubmit it if there are any errors.