CS 300 Data Structures
Assignment-5 November 24, 2018

Due Date: Dec 3rd 2018 11:50pm (Monday)

In this assignment, you are asked to store UPC data given in assignment4 in a hash table size with 1000. Please provide an implementation for Hashing with Separate Chaining collision resolution strategy. Modify your code in assignment4 and perform experiments using your hashing implementation. Keep timing for experiments and draw a graph to compare the results of the performances of three implementations: unsorted array, binary search tree and hashing.

HOW TO SUBMIT
Please follow the following steps for the assignment: 1. Create a separate repository in GitHub 2. **Clone** the repository to your local computer. 3. Modify the files and **commit** changes to complete your solution in your local repository. 4. **Push**/sync the changes up to GitHub. 5. To turn in the assignment, send the link for the repository via CANVAS.

HOW TO EVALUATE: The following rubric describes how your work will be evaluated.

Correctness (70 points)

- [70] Program is correct in object oriented design and function; meets specification
- [50] Program output is correct but elements of specification missing, e.g. variable/method declarations.
- [35] Part of the specification has been implemented, e.g. one out of two required
- subprograms.
- [20] Program has elements of correct code but does not assemble/compile.

Performance Analysis and Reporting (20 points)

Readability (10 points)

- [10] Programmer name and assignment present. Sufficient comments to illustrate program logic. Well-chosen identifiers.
- [7] Programmer name present, most sections have comments. Fair choice of identifiers
- [5] Few comments, non-meaningful identifiers
- [0] No programmer name. No comments. Poor identifiers