

Assignment 5

Due April 27th

This assignment will give you a chance to practice searching, sorting, and hash tables techniques.

Question 1

Create a phone book where a user can add names of people and their number. Once a name is added, it cannot be deleted (this is a simple phonebook system, without any advanced features).

The system should allow the user to list all people and their numbers.

Question 2

Add a sorting and searching functionality. Use any search and sort technique of your choice (must be one that was discussed in class). But whatever choice you make, state the name of the technique you used in the submission. Users should be able to search for someone by name or by number.

Question 3

Use the mid square technique and use a hashing function to enhance on the performance of searching. The mid square technique is described in the book. Your hashing table should be of reasonable size, say 100 entries.

Deliverables

Submit your code and sample runs of the system.