

Write a program that handles an address book program, to process the following functions

(1) First, write a class called PhoneDirectory. Add a first name, last name and phone number entry as a private.

(2) The main program uses a simple text-based interface to give the user access to the directory. In a while loop, the program presents the user with a menu of options:

1. Add an entry to the directory
2. Look up a phone number
3. Look up by first name
4. Delete an entry from the directory
5. List All entries in phone directory
6. Exit form this program

(3) Delete an entry by first name.

(4) List the directory in alphabetical order by first name.

(5) Use at least 3 sorting techniques for points 3 & 4, to perform time analysis on these different algorithms.

(6) Lookup an entry by first name.

(7) Lookup an entry by phone number.