Junior Knights Python Program: Telephone Directory

In this program you maintain a telephone directory. In your program you'll allow the user to add new entries to the telephone directory, either one by one or several at a time, delete entries by name, and look up entries by either name or number.

Your program will be a menu driven program. In the beginning of the program you'll start with an empty telephone directory. You'll prompt the user with the following choices:

1) Add an individual entry/Change an existing entry

- 2) Look up a phone number by name.
- 3) Look up a person with their phone number.
- 4) Delete an entry, by name only.
- 5) Quit

For #1, ask the user to enter a name and telephone number and read these in. If the name is new, add this entry to the telephone directory. If the name is already in the directory, simply change the number.

For #2, ask the user for a name and return that person's phone number. If the person is not in the directory, print out an message indicating that the number was not found.

For #3, ask the user for a phone number and return the person with that number, if one exists in the directory. If no one with that number is in the directory, then print out a message indicating so.

For #4, ask the user to enter a name, check to see if it's in the directory, and delete the corresponding entry from the telephone. If no such entry exists, print out a message indicating so.

For this assignment in order for two names to be considered the same, they must be the exact same, including capitalization. Thus, "Dave" and "dave" will be considered as different people. You are guaranteed that all input names will consist of letters only and all phone numbers will be valid 10 digit integers that don't start with 0. To resolve ambiguities please consult the sample program run.

Menu Driven Format

Print out the following menu for the user:

Please make a selection from the following choices:
1) Add an individual entry/Change an existing entry
2) Look up a phone number by name.
3) Look up a person with their phone number.
4) Delete an entry, by name only.
5) Quit

If the user selects option #1, prompt them with the following two question:

What is the name of the person to add/edit to the directory? What is his/her phone number?

If the user selects option #2, prompt them with the following question:

Whose phone number do you want to look up?

If the user selects option #3, prompt them with the following question:

Enter the phone number you want to look up.

If the user selectes option #4, prompt them with the following question:

Whose entry would you like to delete?

Sample Program Run (User Input in Bold)

```
Please make a selection from the following choices:
1) Add an individual entry/Change an existing entry
2) Look up a phone number by name.
3) Look up a person with their phone number.
4) Delete an entry, by name only.
5) Quit
1
What is the name of the person to add/edit to the directory?
Ella
What is his/her phone number?
4076281234
```

Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Quit 1 What is the name of the person to add/edit to the directory? Cindy What is his/her phone number? 2029784176 Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Quit 1 What is the name of the person to add/edit to the directory? Frank What is his/her phone number? 3219295380 Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Ouit 2 Whose phone number do you want to look up? Cindy Cindy's phone number is 2029784176. Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only.

5) Ouit 1 What is the name of the person to add/edit to the directory? Bella What is his/her phone number? 2027775423 Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Quit 3 Enter the phone number you want to look up. 2027775423 The number 2027775423 belongs to Bella. Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Quit 4 Whose entry would you like to delete? Ella Please make a selection from the following choices: 1) Add an individual entry/Change an existing entry 2) Look up a phone number by name. 3) Look up a person with their phone number. 4) Delete an entry, by name only. 5) Quit 3 Whose phone number do you want to look up? Ella Sorry, Ella's number isn't listed in the directory. Please make a selection from the following choices:

```
1) Add an individual entry/Change an existing entry
2) Look up a phone number by name.
3) Look up a person with their phone number.
4) Delete an entry, by name only.
5) Quit
3
Enter the phone number you want to look up.
1234567890
Sorry, no one in the directory has the number 1234567890.
Please make a selection from the following choices:
1) Add an individual entry/Change an existing entry
2) Look up a phone number by name.
3) Look up a person with their phone number.
4) Delete an entry, by name only.
5) Quit
4
Whose entry would you like to delete?
Talia
Sorry, no entry for Talia exists. No action was taken.
Please make a selection from the following choices:
1) Add an individual entry/Change an existing entry
2) Look up a phone number by name.
3) Look up a person with their phone number.
4) Delete an entry, by name only.
5) Quit
5
```

Thanks for using the phone directory app. Goodbye!