

## Lab 4 Tasks

**Q1.** This is a continuation of the phonebook project from the previous labs:

Include a new option called ‘search contacts’ in the main menu. When this option is selected by the user another menu will appear which will have three options: ‘search by name’, ‘search by group’, and ‘back’.

When the search by name option is selected the program will ask the user for a string as input. It will then print information of the contact whose name matches with the input string. If no match is found the program will say so in the console. After printing the contact information or ‘no match found’ there will be an option to either go back to the previous menu or exit the program. Going back will aging print the menu search options menu.

Selecting the search by group option will also ask the user for a string as input. It will then print the information of all the contacts who have that string as one of its group. The no match found and going back options should also be implemented in a similar manner to that of the search by name option.

Selecting the back option in the menu will show the menu main again.

**Q2.** Include another option called ‘delete a contact’ in the main menu. When this option is selected the program will take a string as input from the user. It will then match the string with the name of all the contacts. If a match is found it will then show the information of that contact. The program will then ask the user whether he wants to delete this contact. The user will answer either yes (Y/y) or no(N/n).

If the user selects ‘yes’ the program will then delete that contact from the phonebook and print an acknowledgement message (e.g. ‘The contact has been deleted successfully’) in the console. It will then wait for the user to press any key to go back to the main menu.

If the user selects ‘no’ the program will simply go back to the main menu.