

CS 115 - Introduction to Programming in Python

Lab Guide 09

Lab Objectives: Searching and Sorting

1. Write a program that has the following functionality:
 - a. **selectionSort()**: takes 2 parallel lists of strings. The first list contains the user ids and the second list contains passwords. The function should sort the lists in ascending order of the user names, using the selection sort algorithm.
 - b. **Linear_search()**: takes a list, a search value and a starting index as parameters. Using recursion the function should search the list and find and return the index of the matching name. If there is no such name return -1. The function should use the linear search algorithm.
 - c. **readFile()**: function takes a filename and an empty list as parameters. The function should read the strings from the file and store in the list.
 - d. Write a script that reads the data from the `users.txt` and `passwords.txt` into two separate lists. Your script should then input a name from the user, and find the index of the user in the list. The script should then display the password at the matching index.

Sample Run:

Enter name of user to get password: Brittani Hoar
Brittani Hoar has the password sBl6mBBu