

CST8177 - Lab 11

Searching the password file

Student Name	Student number	Lab section:

Objective

To practice problem-solving skills with several small scripts and their PDL, Data Dictionary (where necessary), and so on. Note: Print out your finished PDL, scripts, and test output to include in your Lab Book.

In-Lab Demo -- Demo the scripts from in this lab, explaining the behaviour.

Searching the password file

Task #1

The following scripts and PDL should be stored in your **bin** directory; if you don't yet have one in your home directory, then create one. You could always use what you learned in **updp** to modify your **.bashrc** file (of course, you will back it up first) to add your own **bin** directory (and **./**, the **pwd**, if you wish).

Write a short script, named **spw**, that does the following:

- Verify that the user is **root**; if not, exit with an error.
 - Verify that the password file exists; if not, exit with an error.
 - Prompt for and read a user name (watch the format of your prompt). How can you check for entry errors?
 - Search the password file for the user name, ensuring that it is the account id and only the account id, and that there cannot be any duplicates found.
 - If the entry exists, display the user's password file entry.
 - If the user does not exist, report that the user is not found.
- Additionally, add the username into a variable called **noacct**s. This variable will eventually contain a comma-separated list (known as CSV, comma-separated values) of all users that don't have accounts.
- Prompt for another user name, ending your loop at end-of-file (**^D**).
 - When the user wants to exit, display the list of users that don't have accounts if **noacct**s is not just an empty string.

Test it thoroughly, with good input and bad.

Task #2

For each valid account, also search for their shadow file entry. Display both lines of output on **stdout**.

Task #3

Finally, for each valid account search for their correct entry in the group file and display it with the lines from both **passwd** and **shadow**.