Spring 2024

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Class Section: **A**

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work."

Submitted to:

Engr. Abdullah Hamid

8 March 2024

Department of Computer Systems Engineering

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LAB I: Introduction to the UNIX

Part 1: Directory Structure and Manipulation:

Question 1:

Solution:
As user bob in the directory /classes/bob, there are multiple ways to reference file, See Screen shots to understand more about it.

Question 2: Navigating to TA's Home Directory:

Solution:

To navigate to the TA's home directory without knowing the full file structure:

cd ~ user i.e. torfanos

I don't try this because I have one user in my laptop.

Question 3: Changing Permissions on file1:

Solution:

To change the permissions on file1 to just execute for user and group, and no privileges for the world, user bob would execute the following command:

chmod ug+x,o-rwx file1

I try the following command,

```
┌──(hzj@ayein)-[~/Desktop/A]
└─$ chmod 770 file3.txt

┌──(hzj@ayein)-[~/Desktop/A]
└─$ ls -l
total 0
-rwxrwx─── 1 hzj hzj 0 Mar  8  2024 file3.txt
```
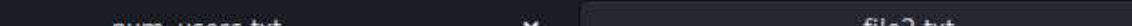
Part II: File Redirection and Pipes:
Question 1:

To store the number of users in a file called num_users, here is Command,

```
                                                                    hzj@aye

File  Actions  Edit  View  Help
┌──(hzj@ayein)-[~]
└─$ Desktop

┌──(hzj@ayein)-[~/Desktop]
└─$ A

┌──(hzj@ayein)-[~/Desktop/A]
└─$ wc -l < file2.txt > num_users.txt
```
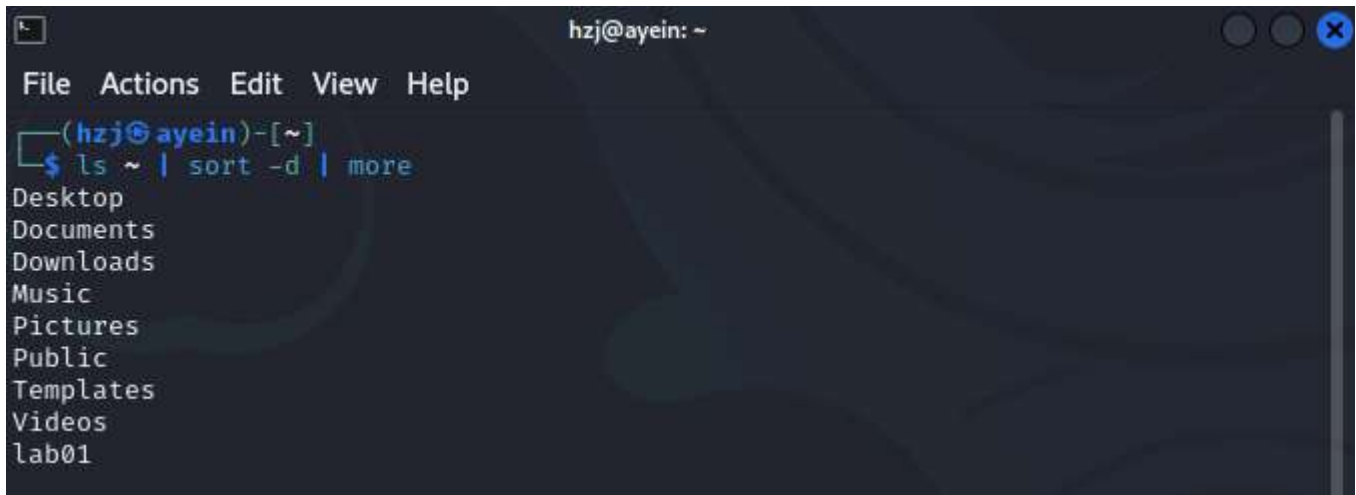
Here is the output,

```
              num_users.txt                    ×                     file2.txt                              ×

1 User 1
2 USer 2                                                    ~/Desktop/A/file2.txt
3 User 3
4
```

```
                                          ~/Desktop/A/num_users.txt - Mousepad

File    Edit    Search    View    Document    Help


                    num_users.txt                           ×

1 3
                         ~/Desktop/A/num_users.txt
```

Question 2: Displaying Sorted Contents:

To display the sorted contents of Bob's home directory one page at a time

Part 3: Wildcards and Special Characters:

Question 1:

Listing specific files.

To list files file2, file3, and file4:

ls file[2-4]

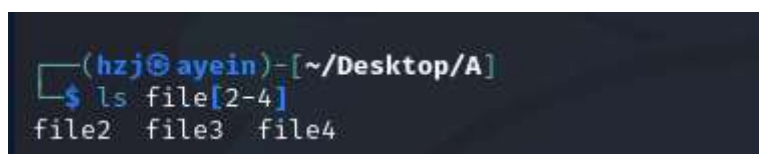This command lists files file2, file3, and file4 using wildcard expansion.

Question 2:

Removing specific files:

To remove files file.c and file.s while keeping file.o:

rm file.[cs]

This command removes files file.c and file.s using wildcard expansion.

Question 3:

Removing files containing a specific word,

To remove any file containing the word 'file':

<div align="center">

rm *file*

</div>

This command removes any file with 'file' in its name using wildcard expansion.

```
┌──(hzj☉ayein)-[~/Desktop/A]
└─$ rm file.c file.s
```

Question 4:

Listing files with specific prefix and suffix

To list all files beginning with 'f' and ending with a 2-letter suffix:

```
┌──(hzj☉ayein)-[~/Desktop/A]
└─$ ls f*.[a-zA-Z][a-zA-Z]
```

This command lists all files starting with 'f' and having a 2-letter suffix using wildcard expansion.

Question 5:

Referencing a file with a special character.

To reference a file named 'hard?' with '?' being a question mark:

<div align="center">

ls hard?

</div>

```
┌──(hzj☉ayein)-[~/Desktop/A]
└─$ ls hard?
'hard?'
```

CSE 302L: Operating Systems Lab

LAB ASSESSMENT RUBRICS

Marking Criteria	Exceeds expectation (2.5)	Meets expectation (1.5)	Does not meet expectation (0)	Score
1. Correctness	Program compiles (no errors and no warnings). Program always works correctly and meets the specification(s). Completed between 81-100% of the requirements.	Program compiles (no errors and some warnings). Some details of the program specification are violated, program functions incorrectly for some inputs. Completed between 41-80% of the requirements.	Program fails to or compile with lots of warnings. Program only functions correctly in very limited cases or not at all. Completed less than 40% of the requirements.	
2. Delivery	Delivered on time, and in correct format (disk, email, hard copy etc.)	Not delivered on time, or slightly incorrect format.	Not delivered on time or not in correct format.	
3. Coding Standards	Proper indentation, whitespace, line length, wrapping, comments and references.	Missing some of whitespace, line length, wrapping, comments or references.	Poor use of whitespace, line length, wrapping, comments and references.	
4. Presentation of document	Includes name, date, and assignment title. Task titles, objectives, output screenshots included and good formatting and excellently organized.	Includes name, date, and assignment title. Task titles, objectives, output screenshots included and good formatting.	No name, date, or assignment title included. No task titles, no objectives, no output screenshots, poor formatting.	

Instructor:

Name: <u>Engr. Abdullah Hamid</u>   Signature: _____