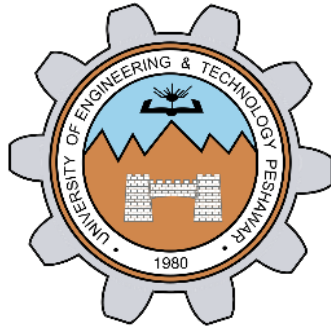# OPERATING SYSTEM LAB

Lab Report # 01

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Section: **A**

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Introduction to UNIX

Part-I Questions:

1) You are the user bob and are in your home directory, the */classes/bob* directory. Give 5 ways to reference the file *file3*. You must use Absolute, Relative and the '.' and '..' reference methods at least once.

Answer:

- Absolute Method: /classes/bob/file3
- Relative Method: /ed/file3
- ".":   ./file3   (. Will refer towards /bob)
- "..":   ../bob/file3   (.. will refer the directory to classes)
- Other Method: ~/bob/file3

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2) If you are logged into DCSE and you want to go to your TA's home directory, how would you do it without knowing anything about the DSCE departments file structure? (Your TA's username is *torfanos*)

Answer: cd *torfanos/..*

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3) If you are user bob, how would you change the permission on file1 to just execute for user and group and no privileges for the world?

Answer: According to me it will be in steps:

1. First Enter chmod 000 file1
2. Then chmod u+x file1
3. Then chmod g+x file1

Part-II Questions:

1) The command wc counts words, characters or lines. The syntax is:

wc [options] [file(s)]

options:
-l counts # of lines in file

-c counts # of bytes in file

-w counts # of words in file

If *file2* is a list of users with more than one on each line, how would Ed (from his home directory) store the number of users in a file called *num_users*?

Answer: **wc -l file2**
(a file will be created in home directory i.e. num_users where he can easily store the number of users.)

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2) The command **sort -d** *file* displays a file in dictionary order. The command more (more file) displays the contents of a file one page at a time.

Show how Bob would display the sorted contents of his home directory one page at a time.

Answer: **Sort -d | more file**

Part-III Questions:

These questions are based on a directory which has the following files in it:

file1 file2 file3 file4 afile file.c file.s file.so file.o farm.c farm.co

NOTE: All expansion solutions should be of the format command file(s). There should only be one argument following command and in order to get multiple files you must use wildcards.

1) How would you list files these files (*file2, file3, file4*)?

   Answer: ls file[2-4]

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2) How would you remove, using the rm *file(s)* command, *file.c* and *file.s* (keep note: *file.o*)?

   Answer: rm file *.c *.s

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3) How would you remove any file which contains the word *file* in it?

   Answer: rm file*

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4) How would you list all files that begin with f and end with a 2 letter suffix.

   Answer: ls f*`

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5) If you had a file which was called hard? , with ? actually being a question mark. How would you reference that file ?

   Answer: ⁄`hard?`