

Name:

On Pre-flights:

- If you work with anyone else, document what you worked on together.
- If you are not using python, then substitute your language of choice when Python is specified.

Do not write in the table to the right.

Problem	Points	Score
1	19	
2	8	
3	4	
4	4	
5	6	
6	4	
Total:	45	

1. (a) (2 points) What is the difference between absolute and relative paths?

absolute path is the location of the file or directory from the root directory
`/C/User/Demo/Test`

relative path is the path defined as the path related to the present working directory
if in Demo I can access Test directly with the relative path

- (b) (1 point) What command can you use to find where you currently are in the directory structure?

`pwd`

- (c) (1 point) What is the command to change directories?

`cd <path/dir_name>`

- (d) (1 point) What is the command to take you back to your home directory, regardless of where you are in the directory structure?

`cd ~`

- (e) (1 point) What is the command to take you up to your parent directory?

`cd ..`

- (f) (1 point) What is the command to see what files are in the current directory?

`ls`

`ls -all` in case of hidden files

- (g) (1 point) What is the command to create a directory?

`mkdir <dir_name>`

- (h) (3 points) What are two different text editors? Which do you prefer?

nano -- decent
gedit -- preferred
vim -- all of my hate

- (i) (1 point) What is the command to remove a file?

`rm <file>`

- (j) (1 point) What is the command to remove a directory?

`rm -r <directory>`

- (k) (1 point) What is the command to remove a directory and its sub-directories?

`rm -rf <directory>`

deletes everything within the directory

- (l) (1 point) How would I remove all .py files from a directory?

`rm *.py`

since * is a wild card anything ending with .py would be deleted

- (m) (4 points) How would I find out what options ls has? Describe what the -a, -l, and -h options do.

`ls --help`

-a same as --all doesn't ignore entries starting with "."

-l use a long listing format

-h with -l and/or -s prints human readable sizes

2. (8 points) From a Linux terminal:

- Create a directory @ /NENG685/PF/PF6
- Create a file name pf6.txt
- In the file write: "This is how you create and edit a file."
- Save the file

Submit a screenshot of the current working directory path and the contents of that

directory.

3. (4 points) From a Linux terminal:

- Create a directory @ /NENG685/PF/PF7
- Copy pf6.txt from /NENG685/PF/PF6 to /NENG685/PF/PF7

Submit a screenshot of the current working directory path and the contents of that directory. Make sure the commands required for the two steps are captured in the screenshot.

4. (4 points) From inside the Linux terminal, what commands do we use to log in to another remote machine? To transfer files to that machine? For this example, use enplab01.aft.edu.

ssh <name of remote host>

or

ssh <username>@<remote_host>

scp <source> <destination>

Indicate the username of the remote location

Logged into destination location

scp <username>@<remote>:<source> <destination>

Logged into source location

scp <source> <username>@<remote>:<destination>

5. (a) (2 points) What is an environment variable?

Dynamic value which affects the processes or programs on a computer. They govern the behavior of programs in the OS. In this case it would be the Linux VM not the Windows 10 OS.

- (b) (2 points) Where are these saved so that they are loaded upon user login?

Typically the .profile file in the user's home directory

They can be placed in the .bashrc file but keep in mind that .bashrc is ran on every interactive shell launch while the .profile is only run once at the start of a new login shell

- (c) (1 point) What is an alias?

Its a command that allows you to associate a string with a given more complex command.

IE alias home = 'cd /home/enp/user/test'

would allow me to enter "home" into the command line and go to the inidicated directory without having to type it completly out

- (d) (1 point) How do I update my environment variables after editing my .bashrc so that they take effect in the *current* terminal window?

enter "bash" into the command line. Technically closing and reopening terminal window.

Or "source ~/.bashrc" but this will preserve the current shell and its state so rolling abck an enviroment variable wouldn't take affect.

Or "exec bash" which will only preserve the current shell's enviroment variables

6. (4 points) Log in to pbs-afit-l01 and do the following:

- Copy the example_bashrc file from /apps/enp/transport/work to your home directory as .bashrc.
- Navigate to /apps/enp/transport/work/<your user name>

Submit a screenshot of the the contents of your home directory (showing the new .bashrc) and the contents of your personal directory in transport.