

Quiz-week-5

Due: Thursday OCT-1st 11:59 PM

1. Directory 'diry' has 3 files inside listed here: **\$HOME/dirx/dir**
 - filex**
 - filey**
 - filez**
- a. Write a command to make a directory called 'new-dir' in your \$HOME directory.
\$ mkdir new-dir
- b. Write a command to copy all files from 'diry' into the new directory called 'new-dir' you just created in your home directory. Assume that you are in your home directory.
\$ cd dirx/dir
\$ cp * ~/new-dir
- c. Write a command to rename the 'diry' to dir-yy
\$ mv diry dir-yy
- d. Give the command to create a hard link from a file called 'filex'.
 - i. **\$ ln filex cal_file**
 - ii. **\$ ln filex cal_file**
- e. Give the command to create a symbolic link from filex to a new file called 'sym-filex'
 - i. **\$ ln -s filex sym-filex**
- f. Change the permission of dir-yy so that the owner of the directory has rwx, r-x for the group, and --- for others.
 - i. **\$ chmod 750 dir-yy**
- g. Set the UID bit on the below script file with the following content.
 - i. **\$ vi sayit**

#!/bin/bash
echo `date`
echo "how are you"

 - ii. Change the permissions of the script file 'sayit' to 755.
\$ chmod 755 sayit
 - iii. Set the UID bit on the file script file called 'sayit'.

\$ chmod u+s sayit

- h. Show how you set your PATH so that your path will have the following directories.
- /usr/bin:/usr/sbin:\$HOME/bin**

\$ export PATH=\$PATH:/usr/bin:/usr/sbin:\$HOME/bin

- i. Set the PATH in your **\$HOME/.bashrc** file so that it will always be active when you first log onto the system.

```
$ cd ~ ;  
$ vim .bash_profile  
insert "~/bashrc" to the file
```

- j. Make a directory in your home directory called 'test-data'

- \$ mkdir test-data**

- Copy all files from the /etc directory that begins with the letter 'p' followed by the letter 'r' followed any other characters to your \$HOME/test-data.

```
$ cd /etc  
$ cp pr* ~/test-data
```

- What is the size of the data in your test-data directory. Use the 'du' command with the proper options all the sizes of the files and also the total space used by the directory.

```
$ du -a  
4      ./printcap  
4      ./profile  
8      ./protocols
```

total = 16 disk blocks

```
$ du -h  
16K
```

2. Given a directory called 'diry' and a file called 'filex', please answer the following questions.

- Write a test command to test if 'diry' is a directory
 - \$ test -d diry**
- Write a test command to test if 'filex' is a file.
 - \$ test -e filex**
- Write a test command to test if filex is 'executable' . If so, include a logical AND (&&) clause that echo "Yes - filex is a executable"
 - \$ test -x filex && echo "Yes - filex is a executable"**
- Write a test command to test if filex has a size greater than 'zero'.
\$ test filex -gt 0
- A file system pointer (to the disk block) is allocated every time you create a file.