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# ***O P E R A T I N G   S Y S T E M S***

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## ***Instructions:***

- Work on this lab individually, **NO COLLABORATION** with other students is allowed.
- Read the statements carefully and then perform each of the tasks on **LINUX** shell.
- Use command line interface only, **DO NOT USE GUI** of Linux at all.
- After running EACH command, **MUST** paste the **screen shot/snip** of the command and its output in a **word file**.
- For conceptual questions, answer them in your own words accordingly.
- **Deadline:** Till Sunday night 11:59pm

## ***Basic Shell Commands:***

1. Write a command to see your user name.
2. Create a file named "testingFile" in /tmp directory.
3. Now check the type of "testingFile". Write the command you used for checking the file type.
4. What is the difference between rm and rmdir commands? Also, show the difference by running both of the commands.
5. Write a single command to go back to the home directory.
6. You have a file in your home directory called "tryit&" (Note: & is part of file name). Rename this file to **tryit\_now**. What command did you use?
7. Write a command to give another name "myclear" to the shell command clear.
8. Write output of following:

a) alias cls=clear  
cls  
alias cls=ls  
cls

**OUTPUT?**

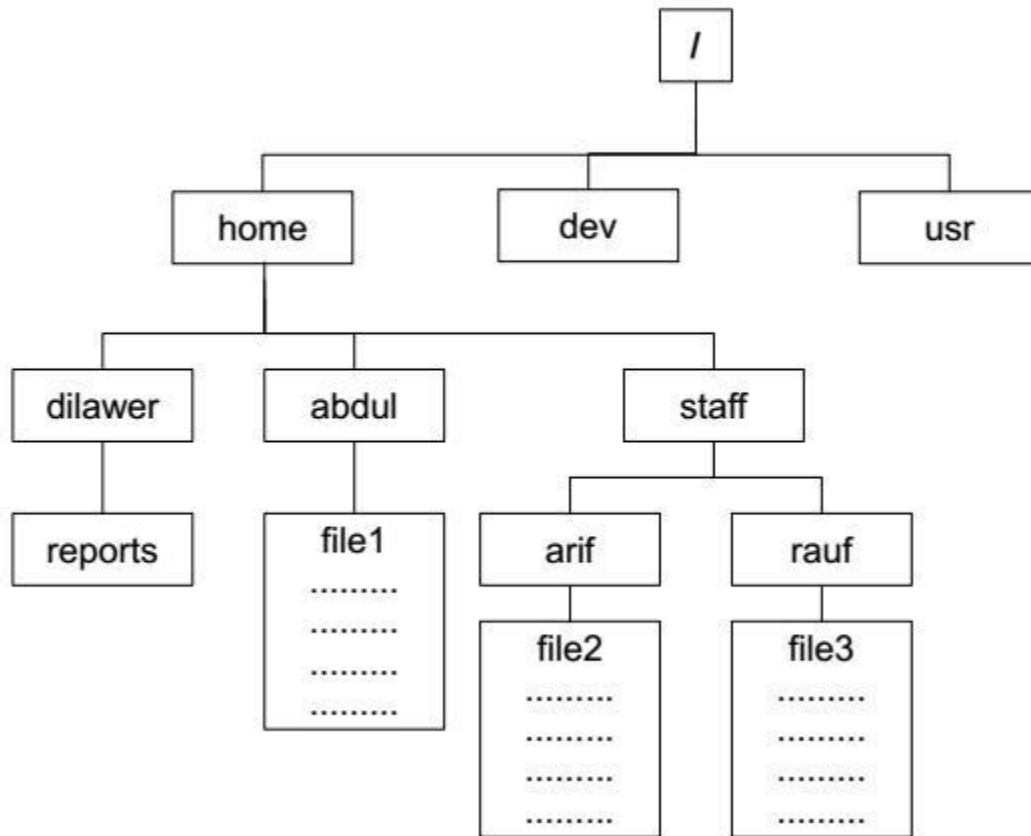
b) mkdir d1  
cd d1  
touch f1 f2  
touch f1  
cd  
mkdir d1

**OUTPUT?**

**Questions:**

1. Write a single command to make a directory named as your Roll Number in /tmp directory, make a sub-directory inside your Roll Number Directory named as your own Name then again make a sub-directory in your Name Directory named as OS.  
(e.g.: /tmp/BCSF15M5XY/Rehan/OS)  
**Note: use only single command to make all the three directories!**
2. List down the details of the hidden files in your home directory.
3. List down 2 ways to remove all the three directories you created in part 2 using a single command. Also, use any of the 2 ways to remove the three directories and show that they are removed!
4. Create a file named as **testFile** in /tmp, write at least 10 lines about yourself and the OS course.  
Now write a command to display the contents of testFile with line numbers.
5. Write a command to rename testFile to **test@File!**, check whether the testFile still exists or not?
6. Display last 2 lines of **test@File!**
7. Make an alias as **unleash** for the command you used in part 3 and again display the details of hidden files in your home directory using that alias.
8. Which command do you use to see complete details of a command on the shell?
9. Write a command to see whether **type** is an internal command or not!
10. How can you remove a directory **without** using **rmdir** command?

## *Absolute/Relative path*



- 1- Create directory reports in dilawer using single command (**pwd home**).
- 2- Assume your pwd is reports create directory abdul using absolute path.
- 3- Create file "file1" in abdul using relative path (**pwd reports**).
- 4- Create directory arif and rauf in staff using relative path (**pwd abdul**).
- 5- Create file2 and file3 (**pwd staff**).
- 6- Copy file2 and file3 in abdul using absolute path.
- 7- Copy the staff directory including its subdirectories in new directory "dilawer/newdir" (**pwd abdul**).
- 8- Remove directory staff using relative path (**pwd newdir**).
- 9- Write a command to rename file2 in newdir with reFile2 (**pwd newdir**).