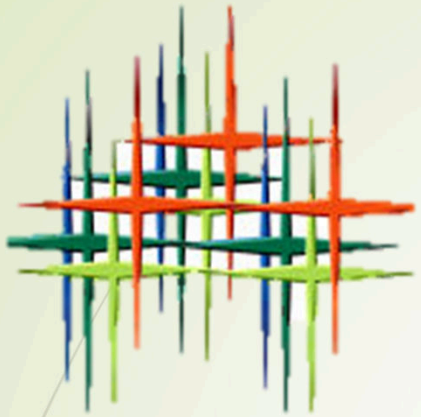

ABC IT Education

WE'LL TAKE YOU FROM ZERO TO HERO IN A SNAP

Linux Systems Administration

Homework 4
== Solutions ==

Use your Home Centos for this Home work show the command that will answer each

1. Create a directory called 'training' under your home directory.
   i. First do a 'cd ~' or a simple 'cd' to make sure you are in your home directory.
   ii. Then 'mkdir training', to make the training directory
2. What are the permissions of the 'training' directory?
   i. 775 (User 'rwx' Group 'rwx' Other 'rx')
3. Create the directories abc, abc/first and abc/first/child under the 'training' directory using one command. Show 2 ways of doing it.
   i. Option 1
      a) First 'cd training', As we are the home directory
      b) mkdir abc abc/first abc/first/child
      c) mkdir –p abc/first/child

ii. Option 2

a) Stay in the home directory

b) $ mkdir ./trsaining/abc ./training/abc/first ./training/abc/first/child

c) $ mkdir –p ./training/abc/first/child

4. Change directory to the ‘child’ directory.

Depends on where you are

$ cd ./training/abc/first/child : if you are in home directory

$ cd abc/first/child : if you are in the training directory

5. Verify you are in the ‘child’ directory.

$ pwd

Then check you’re in <home directory>/abc/first/child

6. From the ‘child’ directory create directory ‘students’ under the ‘training’ directory.

   $ mkdir ../../../students

7. How can you display the contents of the /etc/passwd file?

   $ cat /etc/passwd

8. How many (i) characters (ii) words and (iii) lines are in the file /etc/group. Show 2 ways to do this.

   i. Characters

      $ cat /etc/group | wc –m or $ wc –m /etc/group

   ii. Words

      $ cat /etc/group | wc –w or $ wc –w /etc/group

   iii. Lines

      $ cat /etc/group | wc –l or $ wc –l /etc/group

Use your Home Centos for this Home work show the command that will answer each

9. Change directory to the 'students' directory using its relative path.

   $ cd ../../../students, as you should be in 'child' directory

10. In the 'students' directory create 3 files, myuser, mygroup, myother, using the 'touch' command.

    $ touch myuser mygroup myother

11. Grant (add) read, write, execute permissions to all user groups for the file 'myuser' using symbolic notation. Show 2 ways to do this.

    $ chmod a+rwx myuser or $ chmod ugo+rwx myuser

12. Grant (add) read, write, execute permissions to all user groups for the file 'mygroup' using numeric notation.

    $ chmod 777 mygroup

Use your Home Centos for this Home work show the command that will answer each

13. Set read, write, execute permissions to all user groups for the file 'myother' in 2 ways using symbolic notation.

    $ chmod a=rwx myother or $ chmod ugo=rwx myother

14. Using one command revoke (remove) write permissions from group and execute permission from other for the file myother. Use symbolic notation.

    $ chmod g-w,o-x myother

15. Remove write and execute permissions from all users using numeric notation for the file mygroup. How can you do the same thing with symbolic notation?

    $ chmod 444 mygroup

    $ chmod a-wx mygroup

    $ chmod ugo-wx mygroup

Use your Home Centos for this Home work show the command that will answer each

16. Set the permissions for all user groups to read and execute for the file myuser. Show 3 ways to achieve this.

    $ chmod 555 myuser

    $ chmod a=rx myuser

    $ chmod a=rwx,a-w myuser

17. Since you are in still in the 'students' directory, use relative path to list the 'training' directory and all the directories and files below it.

    $ ls –R .. or $ ls –R ../../training

18. We have not seen the 'umask' command yet, if I asked you to use it, how would you find help on the command?

    $ man umask

Use your Home Centos for this Home work show the command that will answer each

19. Now it is time to clean up, so delete the following files and directories from your current location, (a) 'child' directory using 2 ways; (b) 'abc' directory recursively.

    (a) $ rmdir ../abc/first/child or $ rm –r ../abc/first/child

    (b) $ rm –fr ../abc

Hope You had fun & Happy Linuxing