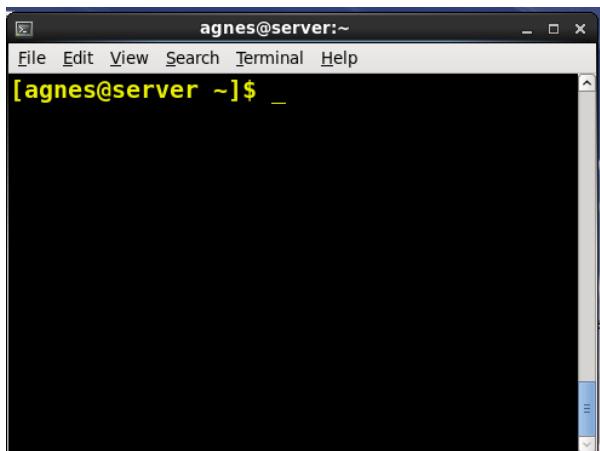


LINUX PRACTICAL TEST REVISION

Name:	Admin No.	Group:	Seat/PC No.
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INSTRUCTION:

- Write your name, admin number and group in above boxes.
- If you need to create any files or folders, create them in the server's (VM) C:\ drive unless the question states otherwise. Do not create them anywhere else.
- You must copy the screen output and paste it into the text box for marking. You can use the snipping or other tool to do this.
- All tasks are performed on the Linux Server. If the Linux Client need to be accessed, it shall be stated.
- If the question states to use CLI (Command Line Interface), you must use the terminal mode as shown below.



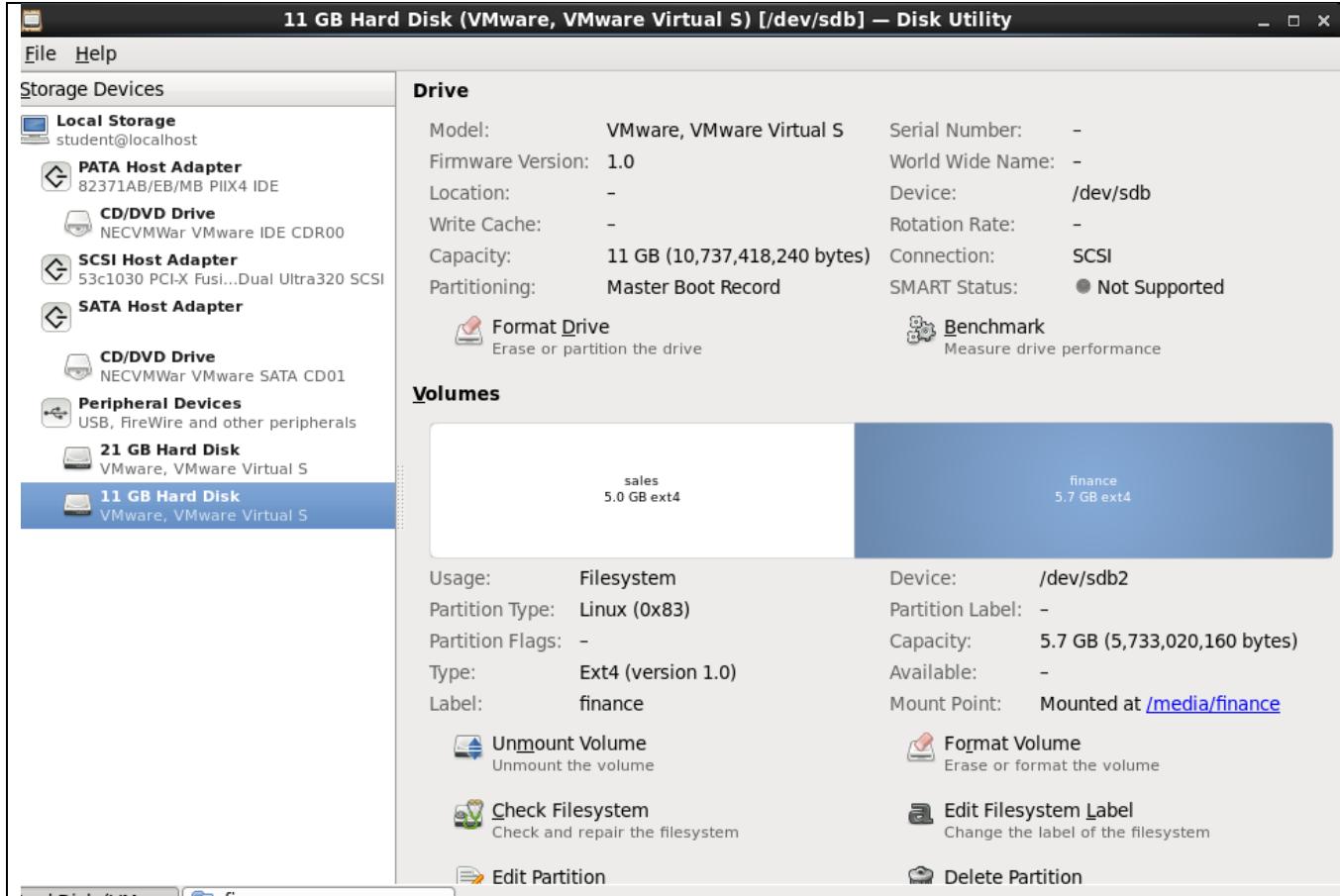
- Directory listing is in long format unless otherwise stated.

Tasks:

1. Add a hard disk to the Linux Server of 10 GB. Configure it into 2 partitions of about 5 GB each and mount them as Sales and Finance

[Practical 8C]

Use disk utility to show your disk configuration.



2. Configure the server network settings as follows:

IP4 address = 10.0.0.5

Network mask = 8 or 255.0.0.0

DNS = 10.0.0.5

[Practical 8B]

Use the graphical interface to display the network settings (ie. NOT using ifconfig).



3. Create 2 users - agnes and sally with same password “redhat”. You can use any method for this.

[Practical 9C]

Use CLI to display output screen to show the users and their password have been created.

```
agnes:x:813:813::/home/agnes:/bin/bash
sally:x:814:814::/home/sally:/bin/bash
[root@server ~]#
agnes:$1$4DCR.1Lu$lMhQ2M5b2NVk/Z6Vg8XFB/:18466:0:99999:7:::
sally:$1$cL0Apyzg$mi.Ck5P7g0ZjCnE/k4sC8/:18466:0:99999:7:::
[root@server ~]#
```

4. Create a group named “admingroup” and add agnes and sally as its members. You can use any method to do this.

[Practical 9C]

Use CLI and display the command and output screen to show the group is created with agnes and sally as its members.

```
[root@server ~]# grep admingroup /etc/group  
admingroup:x:906:agnes,sally  
[root@server ~]# _
```

5. Switch to agnes account. Change to agnes home directory and list the contents including hidden ones.

[Practical 9A]

Use CLI to display current location and list the directory (including hidden items). Display the commands and output here.

```
[agnes@server ~]$ pwd  
/home/agnes  
[agnes@server ~]$ ls -la  
total 32  
drwx----- 4 agnes agnes 4096 Jul 22 02:54 .  
drwxr-xr-x 13 root root 4096 Jul 22 02:47 ..  
-rw-r--r-- 1 agnes agnes 18 Apr 23 2012 .bash_logout  
-rw-r--r-- 1 agnes agnes 176 Apr 23 2012 .bash_profile  
-rw-r--r-- 1 agnes agnes 124 Apr 23 2012 .bashrc  
drwxr-xr-x 2 agnes agnes 4096 Jul 14 2010 .gnome2  
drwxr-xr-x 4 agnes agnes 4096 May 11 2015 .mozilla  
-rw----- 1 agnes agnes 63 Jul 22 02:54 .xauth5GaBQk  
[agnes@server ~]$ _
```

6. Make a sub directory named “salesreport” inside /home/agnes directory. You can use any method to do this. Change the salesreport permission such that “others” has no permission at all. Display the directory and its permissions.

```
[agnes@server ~]$ ls -la  
total 36  
drwx----- 5 agnes agnes 4096 Jul 23 07:05 .  
drwxr-xr-x 40 root root 4096 Jul 23 07:04 ..  
-rw-r--r-- 1 agnes agnes 18 Apr 23 2012 .bash_logout  
-rw-r--r-- 1 agnes agnes 176 Apr 23 2012 .bash_profile  
-rw-r--r-- 1 agnes agnes 124 Apr 23 2012 .bashrc  
drwxr-xr-x 2 agnes agnes 4096 Jul 14 2010 .gnome2  
drwxr-xr-x 4 agnes agnes 4096 May 11 2015 .mozilla  
drwxrwx--- 2 agnes agnes 4096 Jul 23 07:05 salesreport  
-rw----- 1 agnes agnes 63 Jul 23 07:05 .xauthwKPhU6
```

7. Change the salesreport group owner to admingroup. Change the permission of the group owner of salesreport to Read and Execute only. Display the salesreport permissions using CLI.

```
[agnes@server agnes]$ ls -l
drwxr-xr-x. 4 agnes agnes 4096 May 11 2015 .mozilla
drwxr-x---. 2 agnes admingroup 4096 Jul 23 07:05 salesreport
-rw-----. 1 agnes agnes 63 Jul 23 07:05 .xauthwKPhU6
[agnes@server agnes]#
```

8. While logged in the server as agnes, create 3 files in /home/agnes directory. Name the files as jan.txt feb.txt mar.txt. They can be empty or non-empty. You can use any method to do this.

Display /home/agnes directory to show the 3 files in long listing format.

```
[agnes@server ~]$ ls -l
total 4
-rw-rw-r--. 1 agnes agnes 0 Jul 23 07:14 feb.txt
-rw-rw-r--. 1 agnes agnes 0 Jul 23 07:14 jan.txt
-rw-rw-r--. 1 agnes agnes 0 Jul 23 07:14 mar.txt
drwxrwx---. 2 agnes agnes 4096 Jul 23 07:05 salesreport
[agnes@server ~]$
```

9. Create a directory /home/reports and make it shareable to the admingroup. Admingroup members have Read & Write & Execute permissions but cannot delete others files. Others have no access at all. Display the /home/reports permission after configuration.

```
[root@server home]$ ls -ld /home/reports
drwxrws--t. 2 root admingroup 4096 Jul 23 09:48 /home/reports
[root@server home]#
```

10. Switch to agnes and sally accounts and create some files in the /home/reports directory. Issue the command “ls -la /home/reports” and paste the command and output below as proof.

```
[agnes@server reports]$ ls -la /home/reports
total 8
drwxrws--t. 2 root admingroup 4096 Jul 23 10:02 .
drwxr-xr-x. 42 root root 4096 Jul 23 09:48 ..
-rw-rw-r--. 1 agnes admingroup 0 Jul 23 10:02 agnes.out
-rw-rw-r--. 1 sally admingroup 0 Jul 23 09:58 sally.out
[agnes@server reports]$
```

11. Create another user mike and show that he cannot access the /home/reports directory. Display your proof below.

```
[mike@server reports]$ ls -la /home/reports
ls: cannot open directory /home/reports: Permission denied
[mike@server reports]$
```

12. Use ACL to enable mike to have Read access only to /home/reports directory. Display the ACL permissions after configuration.

```
[root@server ~]# getfacl /home/reports
getfacl: Removing leading '/' from absolute path names
# file: home/reports
# owner: root
# group: admingroup
# flags: -st
user::rwx
user:mike:r-x
group::rwx
mask::rwx
other::---x
```

13. Use tar command to backup /etc directory to /var directory. The backup file name is backup.tar. Display the command and the backup file.

```
[root@server ~]# tar -cpzf /tmp/backup.tar /etc
tar: Removing leading `/' from member names
[root@server ~]# ls -l /tmp/backup.tar
-rw-r--r--. 1 root root 8560653 Jul 23 20:35 /tmp/backup.tar
[root@server ~]#
```

- End of Paper -