



# ABC IT Education

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

# Linux Systems Administration

## Homework 9

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

Using the 'training' directory created in the last home work

1. What is the crontab entry for the scenarios below.
  - i. Schedule job '/home/myhome/setPerms' runs every 15 minutes on Mondays, Wednesdays and Fridays and ignore the errors.

```
*/4 * * *1,3,5 /home/myhome/setPerms 1> setPerms.log 2> /dev/null  
0,15,30,45 * * *1,3,5 /home/myhome/setPerms 1> setPerms.log 2>  
/dev/null
```

- ii. Schedule job '/home/myhome/createUsers' runs at midnight, on the 1<sup>st</sup>, 15<sup>th</sup> and 30<sup>th</sup> of the month with 31 days and send all the output to createUsers.log.

```
0 0 1,15,30 1,3,5,7,8,10,12 * /home/myhome/setPerms 2>&1  
createUsers.log
```

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- iii. Schedule job '/etc/parseLogs' runs at 2:30 AM on Sundays of the even months and send the output to parselogs.log and errors to parselogs.err.

```
30 2 * 2,4,6,8,10,12 0 /home/myhome/setPerms 1> parselogs.log 2> parselogs.err
```

## 2. Explain your understanding of the following

- i. The difference between the commands 'su' and 'su -'

Both su and su - starts a session as another user on the system but su maintains the environment of the current user while su - creates an environment similar to that of the other user

- ii. The difference between 'su' and 'sudo'

Both run commands as another user. For su, you'll need to know the password of the other user while for sudo you use your own password

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3. If I am logged in as 'adminuser' but I need to run commands as 'msaks', show 3 ways of doing that.

`sudo -u msaks <command>`

`su msaks -c <command>`

switch to the msaks account `$ sudo su - msaks`, then run the commands

4. What does the 'history' command do and what are some of its benefits?

The history command displays the commands in your shell history, and precedes each one of the commands with a number that can be used to reference that command at a later time.

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5. If I run the 'history' command and want to repeat certain commands how will I achieve the following?
  - i. Repeat the last command that started with 'so' **!so**
  - ii. Repeat the command on line 201 **!201**
  - iii. Repeat the last command I executed **!!**
6. If I run the command `$ tail one.txt zero.txt out.log` testing then the following are the same, True or False
  - i. `!:2` is zero.txt **True**
  - ii. `!:1 = !^` **True**
  - iii. `!$ = !:4` **True**
  - iv. `tail = !:0` **True**
  - v. `vi !$ = vi !:4` **True**

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7. After executing the command `'echo DEL MA VA'`, what would be the result of the command

`echo "I live in the !e:2 area of !^ !:2 !$ region"`

I live in the MA area of DEL MA VA region

8. What are the primary package managers used to install packages in Linux? Also list the utilities and commands used for each package manager you listed.

RPM ( utility ( yum ) and command ( rpm )

APT ( utilities and commands are apt-[cache, get] and dpkg )

9. If the `'cat'` command is in `/bin/cat`, how can I tell what package the `'cat'` command belongs to and the files in that package? Provide answers for both RPM and DEB flavors of Linux.

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RPM

`rpm -qf /bin/cat` and `rpm -ql <package>`

DEB

`dpkg -S /bin/cat` and `dpkg -L <package>`

10. How would you install the following applications, `linuxClasses_x86_64.rpm` and `linuxClasses_x86_64.deb` downloaded from the internet, without being prompted to answer installation questions?

`rpm -ivh linuxClasses_x86_64.rpm`

`dpkg -i linuxClasses_x86_64.deb`

without being prompted to answer installation questions

Note: using `rpm` and `dpkg` to install packages there is no specified option to disable installation questions