What is meant by usermod command??? How it's used in Linux?? Explain with examples?

usermod command is used to make changes in any of the conditions and characteristics of already existing user account via command line.

'useradd' or **'adduser'**, is used to create new user accounts in Linux. But after creating new account you need to change some attributes like change user's home directory, login name, login shell, change expiry date and many more, in this case **'usermod'** command is used.

Whan we make changes in the user's account, following files are influenced:

/etc/passwd - Account infomation.

/etc/shadow - Secure account information.

/etc/group - Group account information.

/etc/gshadow - Secure group account information.

/etc/login.defs - Shadow password suit configuration.

Lets see the use of usermod command with practical examples.

1. How to add infomation to user account.

'-c' or **'--comment'** - option is used to give new value of the user's password file comment field. **/etc/passwd** file will be affected and you can see the comment.

You can check the change with **'grep -E --color'** command. Where, grep is used to surrounds the matching pattern with color and '-E' is to interpret pattern as an extended regular expression(ERE).

Adding information on **'rockboom'** user.

```
<p> # usermod -c "Hello, here is rocky" rockboom</p> <p>#
grep -E --color 'rockboom' /etc/passwd </p>
```

2. How to Change User Home Directory

'-d' or **'--home'** - this option is used to create users login directory.

Current home directory is **/home/rockboom**. For example, change it to **/lib/bin**. As show below.

```
<p> # usermod -d /lib/bin rockboom</p> <p># grep -E --color '/lib/bin' /etc/passwd</p>
```

3. How to set User Account Expiry Date

'-e' or **'--expiredate'** - option is used to change the date on which user account will expire. The date is in YYYY-MM-DD format.

Before changing the expiry date you can check your current account expiry date by using **chage** command followed by **'-l'** option.

```
<p> # chage -l rockboom</p> <p># usermod -e 2019-01-01 rockboom</p
```

4. How to change User Login Name

'-l' or **'--login'** - option is used to change user login name. For example lets change the login name from rockboom to rockboom_test. before changing the login name don't forget to check the current login name.

```
<p> # id rockboom</p> <p># usermod -l rockboom_test rockboom</p>
```

5. How to create Un-encrypted password for User

'-p' or **'--password'** - options are used to create un-encrypted password. For example lets create a password **'centos'** for **starman** user.

```
<p> # usermod -p centos starman</p> <p># grep -E --color 'starman' /etc/shadow</p>
```

6. How to change user Shell

'-s' or **'--shell'** - option is used to change user shell. For example user starman has **/bin/bash** shell by default, i want to cha it to **bin/bc**. As show below:

```
<p> # grep -E --color 'starman' /etc/passwd</p> <p># usermod -s /bin/bc
starman</p>
```

7. How to change user ID

'-u' or **'--uid'** - option is used to set new numerical value of the user's ID. The value must be positive. For example i want t change UID from 3001 to 1003. As shown below:

```
<p> # id starman</p> <p># usermod -u 1003 starman</p>
```

8. How to change user's primary group

'usermod -g groupname' command is used to change user's primary group. Where **'-g'** option is responcible change the given group. Before changing check the current user's primary group with **groups urers_name command**. As shown belo

```
<p> # groups robin</p> <p># usermod -g appusers robin</p>
```

9. How to add a user to a supplementary group

'usermod -aG groupname username' command is used to add a user to a supplementary group. Before changing check the user's group with **'id username'** command.

Where

'-G' - option will add a group for a user.

'-a' - option makes usermod function in append mode and without it user would removed from all supplementary groups.

 # id robin

usermod -aG centos robin

10. How to lock User Account

'-L' option is used to lock a user's account. after locking the user's account you can see **'!'** sign before the encrypted password in **/etc/shadow** file, which means password is disabled i.e. you can't login using password. As shown below:

 # usermod -L robin

grep -E --color 'robin' cat /etc/shadow

11. How to unlock User Account

'-U' option is used to unlock user account. After unlocking the user account you can see **'!'** sign is removed before the encrypted password in **/etc/shadow** file. As shown below:

```
<p> # grep -E --color 'robin' cat /etc/shadow</p> <p># usermod -U robin</p>
```

12. How to move user's Home Directory.

'-m' option is used to move the content of user's home directory to a new location and this option is only work in the combination with **'-d'** option. As shown below.

grep -E --color - is used to see current home directory

ls -l - is used to display content of home directory

```
<p> # grep -E --color 'robin' /etc/passwd</p> <p># ls -l /home/robin</p>
<div># usermod -d /var/robin/ -m robin</div>
```

13. How to create user with Non-Unique UID

'-o' option is used to create user with non-unique UID, i.e. you can asign one user ID to another user. But it will work in the combination of '-u' option only.

For example- I have two users john and robin having UIDs 1666 and 1001 respectively and i am going to asign robin's UID to john which means john's UID is going to change from 1666 to 1001.

```
<p> # id john</p> <div># id robin</div> <div># usermod -o -u 1001 john</div>
```