User Administration

In this exercise you will create a user. Please use the suffix number of your centos-xx user for the new user. So for example, centos-11 will create dictu-11.

1. Work with a different Skeleton Directory.

Switch to user the root user and create a new skeleton directory named "/etc/dictu_skel".

```
[centos@centos11 ~]$ sudo bash
[sudo] password for centos:
[root@centos11 centos]# mkdir /etc/dictu_skel
[root@centos11 centos]#
```

With your favorite editor create a .bashrc and a .bash_profile in the new Skeleton Directory, with the following content.

```
[root@centos11 centos]# cat /etc/dictu_skel/.bashrc
PS1="2889:root:$PWD : "
[root@centos11 centos]# cat /etc/dictu_skel/.bash_profile
. .bashrc
```

Create a new user with the new Skeleton.

```
[root@centos11 centos]# useradd -m -k /etc/dictu_skel dictu-11
```

Using the *su* command, switch to the new user's environment, check the Primary System Prompt and *exit* that environment.

```
[root@centos11 centos]# su - dictu-11
Last login: Mon Apr 26 07:53:42 EDT 2021 on pts/0
2889:root:/home/dictu-11 : exit
```

2. Password Aging

Using the *chage* command change the changedate of the new User's password to 14 days, and verify the change.

```
[root@centos11 centos]# chage -M 14 dictu-11
[root@centos11 centos]# grep dictu-11 /etc/shadow
dictu-11:!!:18743:0:14:7:::
[root@centos11 centos]#
```

The new user is still locked, because it doesn't have a password. Give the user a password.

```
[root@centos11 centos]# passwd dictu-11
Changing password for user dictu-11.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@centos11 centos]#
```

To force the user to choose a new password, you can manually expire the password. Use the passwd command to do that.

```
[root@centos11 centos]# passwd -e dictu-11
Expiring password for user dictu-11.
passwd: Success
[root@centos11 centos]#
```

Exit the root shell back to the centos user. And switch user to dictu-11. You will have to change the password of dictu-11

```
[root@centos11 centos]# exit
exit
[centos@centos11 ~]$ su - dictu-11
```

```
Password:
You are required to change your password immediately (root enforced)
Changing password for dictu-11.
(current) UNIX password:
New password:
Retype new password:
Last login: Mon Apr 26 07:57:45 EDT 2021 on pts/0
Last failed login: Mon Apr 26 07:59:53 EDT 2021 on pts/0
There was 1 failed login attempt since the last successful login.
2889:root:/home/dictu-11:
```

3. Change the login shell from bash into a program or script.

Check whether the *basic calculator* is installed. If not, install it using yum. (yum will be dealt with later.)

```
[centos@centos11 ~]$ which bc
/usr/bin/which: no bc in
(/usr/local/bin:/usr/bin:/usr/local/sbin:/usr/sbin:/home/centos/.loca
l/bin:/home/centos/bin)
[centos@centos11 ~]$ sudo yum install -y bc
(snipped)
Installed:
   bc.x86_64 0:1.06.95-13.el7
Complete!
```

Change the login shell to the bc command for the new user, and verity.

```
[centos@centos11 ~]$ sudo usermod -s /usr/bin/bc dictu-11
[centos@centos11 ~]$ grep dictu-11 /etc/passwd
dictu-11:x:1002:1002::/home/dictu-11:/usr/bin/bc
```

Switch to the new user once more and notice that you are not able to do anything else than calculate from within the basic calculator.

```
[centos@centos11 ~]$ su - dictu-11
```

```
Password:
Last login: Mon Apr 26 08:14:48 EDT 2021 on pts/0
Last failed login: Mon Apr 26 08:15:08 EDT 2021 on pts/0
There was 1 failed login attempt since the last successful login.
bc 1.06.95
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006 Free Software
Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.

10*100
1000
quit
[centos@centos11 ~]$
```

Change the login shell back to bash.

```
[centos@centos11 ~]$ sudo usermod -s /bin/bash dictu-11
[centos@centos11 ~]$ grep dictu-11 /etc/passwd
dictu-11:x:1002:1002::/home/dictu-11:/bin/bash
[centos@centos11 ~]$
```

4. Delete a user.

Switch to the new user and create a file in /tmp.

```
[centos@centos11 ~]$ su - dictu-11
Password:
Last login: Mon Apr 26 08:15:18 EDT 2021 on pts/0
2889:root:/home/dictu-11 : touch /tmp/dictu-11
2889:root:/home/dictu-11 : exit
logout
[centos@centos11 ~]$
```

Exit the new user and delete the user including the login directory and mailspool of that user.

```
[centos@centos11 ~]$ sudo userdel -r dictu-11
[centos@centos11 ~]$ ls -ld /home/dictu-11
ls: cannot access /home/dictu-11: No such file or directory
```

After the user has been deleted find out whether there Any files on your system that are unowned.

```
[centos@centos11 ~]$ find / -nouser 2>/dev/null
/tmp/dictu-11
```

When you list all files in /tmp, who is the owner Of the file you created as the new user before?

```
[centos@centos11 ~]$ ls -1 /tmp
total 0
-rw-rw-r--. 1 1002 1002 0 Apr 26 08:18 dictu-11
```

What do you think will happen if a new user gets created with user-id 1002?

What does the following command do, and is this a good idea?

```
[centos@centos11 ~]$ sudo find / -nouser -exec rm {} \;
```

5. Recreate the user, because you will need it later.

```
[centos@centos11 ~]$ sudo useradd dictu-11
[centos@centos11 ~]$ sudo passwd dictu-11
Changing password for user dictu-11.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
```