**Practice: Users and Groups**

1. Create the users Serena Williams, Venus Williams and Justine Henin, all of them

with password set to stargate, with username (lower case!) as their first name, and

their full name in the comment. Verify that the users and their home directory are

properly created.

#assuming you are root

useradd serena -p stargate -c Serena Williams && userad venus -p stargate -c Venus Williams && useradd justine -p stargate -c Justine Henin

2. Create a user called **kornuser**, give him the Korn shell (/bin/ksh) as his default

shell. Log on with this user (on a command line or in a tty).

useradd kornuser -s /bin/ksh

3. Create a user named **einstime** without home directory, give him **/bin/date** as his

default logon shell. What happens when you log on with this user ? Can you think of

a useful real world example for changing a user's login shell to an application ?

useradd einstime -M -s /bin/date

4. Try the commands who, whoami, who am i, w, id, echo $USER $UID .

5a. Lock the **venus** user account with usermod.

5b. Use **passwd -d** to disable the serena password. Verify the serena line in **/etc/**

**shadow** before and after disabling.

5c. What is the difference between locking a user account and disabling a user

account's password ?

usermod -L venus

passwd -d serena

Locking will prevent the user from logging on to the system with their password by putting a "!" in front of the password in /etc/shadow.

Disabling with passwd will erase the password from /etc/shadow.

6. As **root** change the password of **einstime** to stargate.

sudo usermod -p stargate einstime

7. Now try changing the password of serena to serena as serena.

It fails.

8. Make sure every new user needs to change his password every 10 days.

vim /etc/login.defs

change PASS\_MAX\_DAYS to 10

9. Set the warning number of days to four for the kornuser.

chage -W 4 kornuser

10a. Set the password of two separate users to stargate. Look at the encrypted

stargate's in /etc/shadow and explain.

If you used passwd, then the salt will be different for the two encrypted passwords.

10b. Take a backup as root of /etc/shadow. Use vi to copy an encrypted stargate to

another user. Can this other user now log on with stargate as a password ?

yes.

11. Put a file in the skeleton directory and check whether it is copied to user's home

directory. When is the skeleton directory copied ?

When you create a user account with a new home directory.

12. Why use **vipw** instead of **vi** ? What could be the problem when using **vi** or **vim** ?

vipw will give a warning when someone else is already using that file.

13. Use chsh to list all shells, and compare to cat /etc/shells. Change your login shell

to the Korn shell, log out and back in. Now change back to bash.

chsh -l

cat /etc/shells

14. Which useradd option allows you to name a home directory ?

-d

15. How can you see whether the password of user harry is locked or unlocked ? Give a solution with grep and a solution with passwd.

grep harry /etc/shadow

passwd -S harry

16. Create the groups tennis, football and sports.

groupadd tennis; groupadd football; groupadd sports

17. In one command, make venus a member of tennis and sports.

usermod -a -G tennis,sports venus

18. Rename the football group to foot.

groupmod -n foot football

19. Use vi to add serena to the tennis group.

vi /etc/group

20. Use the id command to verify that serena is a member of tennis.

id (and after logoff logon serena will be a member of tennis)