**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. useradd -m -c "Serena Williams" serena; passwd serena

useradd -m -c "Venus Williams" venus; passwd venus

useradd -m -c "Justine Henin" justine; passwd Justine

tail /etc/passwd; tail /etc/shadow; ls /home

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 -s /bin/ksh kornuser ; passwd kornuser

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 -s /bin/date einstime ; passwd einstime

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

who ; whoami ; who am i ; w ; id ; echo $USER $UID

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

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

**shadow** before and after disabling. grep serena /etc/shadow; passwd -d serena ; grep serena /etc/shadow

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

account's password ?

Locking will prevent the user from logging on to the system with his password (by puttinga ! in front of the password in /etc/shadow). Disabling with passwd will erase the passwordfrom /etc/shadow.

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

log on as root and type: passwd einstime and then type stargate as the new password

7. Now try changing the password of serena to serena as serena. log on as serena, then execute: passwd serena

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

For an existing user: chage -M 10 serenaFor all new users: vi /etc/login.defs (and 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.

On Red Hat Enterprise Linux: chsh -lOn Debian/Ubuntu: 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/shadowpasswd -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