Tutorial Set 2

Before you start these exercises, make sure you

log onto atlas.sheridanc.on.ca through a secure shell

AND

start the ***bash*** shell session.

2.1 View The Calendar

2.1.1 The cal command without any option or argument will output the current month's calendar. Try:

```
cal
```

2.1.2 You can specify the year as an argument

```
cal 1897
```

2.1.3 You can specify the month and yar as arguments

```
cal 2 1991
```

2.1.4 To get information about other options and arguments for the command cal, examine its manual page

```
man cal
```

2.1.5 How do you display the calendar for the current month?

2.1.6 How do you display the calendar for the same month last year.

2.1.7 How do you display the calendar for the year 1980.

2.2 Work With The Date

2.2.1 Display the current time and date

```
date
```

2.2.2 To get information about other options and arguments for the command date, examine its manual page

```
man date
```

2.2.3 You can show formatted date and time. Check the manual page for the formatting options.

```
date +'Date: %m/%d/%Y%nTime: %r'
```

2.2.4 Display date in the following format: Today is Mon MM/DD/YY (Note the command you used).

2.2.5 Dispay the date in three (3) other formats of your choosing. (Use a variety of available formats. Be creative. Note the commands you use)

2.3 View History

2.3.1 List your history of commands

```
history
```

2.3.2 Redo command line 10 assuming that history shows at least 10 commands

```
!10
```

2.3.3 To get information about other options and arguments for the command history, examine its manual page

```
man history
```

2.3.4 Repeat last cal command but pipe it to the word count command to return the number of lines in the output

```
!cal | wc -l
```

2.3.5 Print without executing event number 6

```
!6:p
```

2.3.6 What will the following command do?

```
history 7
```

2.3.7 What will the following command do? (no spaces)

```
!!
```

2.3.8 What will the following command do? Explain (H is capitalized)

```
History 5
```

2.3.9 Give the command to redo line 21 of your history

2.4 View Who is Logged In

2.4. 1 Examine the manual pages for the command who. What does the short description say?

2.4 2 What output do you see when you type the who command without any options and arguments? Explain.

2.4.3 Type the following commands one at a time and note what each does. Compare.

```
who am I
Who am i
who am i
whoami
whoamI
WhoAmI
```

2.4.4 The **mesg** command determines whether other users can send messages to you--and the **write** command can send a message from you to another user. Read the manual pages for mesg and write. Note the syntax of the command. Find a partner and send each other a message using write. What options and arguments did you use?

2.4.5 The **wall** command allows you to send a message to everyone who is logged in on the system. **DO NOT USE the wall command on atlas (or any other production machine) - you may be disrupting or distracting users that are trying to do their work!! Reserve the use of the wall command for administrative tasks, such as informing users of upcoming maintenance, etc.**

2.5 Redirect Output

2.5.1 View the manual page for the cat command. What does cat do?

2.5.2 Now type the cat command and redirect its STDOUT to a file called "randomNames". Note that after you press enter, you are not presented with the command prompt (continue with the next exercises):

```
cat > randomNames
```

2.53 After pressing "Enter", your cursor will just sit there and wait for you to do something, type the following names, pressing "Enter" after each one.

```
Marie Curie
Albert Einstein
Mark Twain
Wolfgang Amadeus Mozart
Stephen Hawking
Isaac Newton
```

2.5.4 Finish the random names list and press CTRL+D to finish. What does the CTRL+D stand for?

2.5.5 Display the calendar for January 2014 and save the output in a file called **jan2014** What command did you use?

2.5.6 Append to your **jan2014** file the current date and time. Note the command(s) you used.

2.5.7 What is the difference between running the following two commands? (other then the year!)

```
cal 1 2011; cal 2 2011; cal 3 2011 >> winter.2011
(cal 1 2012; cal 2 2012; cal 3 2012) >> winter.2012
```

2.5.8 To view winter.2011 and winter.2012, use the cat command. Note the results and your observations after executing each command.

2.5.9 List your history of commands and save them in a file called tutorial2.txt (at the prompt, type the following line, followed by the <enter> key)

```
history > tutorial2.txt
```

2.6 Use Pipes

2.6.1 Use the online manual to explore what the following commands do and their syntax:

grep

wc

2.6.2 Not only do pipes save you time, but you'll use different combinations of piped commands to tackle computing tasks particular to the way you work and the programs you run. At first your pipe commands may be simple, but as you gain confidence and understanding, you'll be able to construct fairly complex pipelines.

Describe the process and result when you run each of the following commands:

```
cal | wc -l
who > file1
who | wc
cat /etc/passwd | wc
cat /etc/passwd | grep baj
cat /etc/passwd | grep baj | wc -l
cat /etc/passwd | grep smi | wc -l
```

2.6.3 List all lines in /etc/passwd that contain the pattern "alex". What command did you use?

2.6.4 Count all lines in /etc/passwd that contain the pattern "alex". What command did you u se?

2.6.5 Save the results of the previous command in a file called "file2". What command did you use?

2.6.6 Using redirection, add (append) the following to file2:

This is the number of lines that contain pattern Alex.

2.6.7 View file2 to verify that you have a number on the first line, followed by the line of text above on the second line.