Unix/Linux Preparation Course
June 27, 2010

Exercises: Editing

vi Cheat Sheet

Open:

```
vi filename          (fn=filename)
vi -r filename       Recover a file from a crashed session
vi + filename        Place the cursor on last line of file.
vi +n filename       Place the cursor on line "n" of file.
vi +/pat filename    Place cursor on line with first occurrence of "pat"tern
```

Close:

```
:w                   Write the file to disk. Don't exit.
:w!                  Write the file to disk even if read/only.
:wq                  Write the file to disk and exit.
:wq!                 Write the file to disk even if read/only and quit.
:q                   Quit the file (only if no changes).
:q!                  Quite the file even if changes.
```

Movement:

```
A                    Move to end of line, change to insert mode.
h                    Move 1 space backwards (back/left arrow).
j                    Move down 1 line (down arrow).
k                    Move up 1 line (up arrow).
l                    Move 1 space forwards (forward/right arrow)
w                    Move cursor to start of next word.
W                    Same as "w".
b                    Move cursor to start of previous word.
B                    Same as "b".
:n                   Go to line number "n" in the file.
```

Editing:

```
i                    Enter in to input mode.
o                    Add a line below cursor and enter in to input mode.
x                    Delete character (del key in some cases).
D                    Delete line from right of cursor to end of line.
dd                   Delete entire line.
u                    Undo last edit or restore current line.
p                    Put yanked text before the cursor.
yy                   Yank current line.
```

Searching:

```
/pattern             Search for "pattern" in the file going forwards.
?pattern             Search for "pattern" in the file going backwards.
n                    Find the next occurrence of pattern found forwards.
N                    Find next occurrence of pattern found backwards.
```

Copy/Cut and Paste
```
nyyp                 Copy n lines to buffer, paste below cursor
nyyP                 Copy n lines to buffer, paste above cursor
nddp                 Cut n lines and copy to buffer, paste below cursor
nddP                 Cut n lines and copy to buffer, paste above cursor
```

1.) PRACTICE USING vi

Remember The vi editor uses "modes"

The easiest thing to do if you get confused in vi is to press the ESCape key a couple of times and start over. With what you were doing. **<u>REMEMBER: ESCape key and start over.</u>**

To begin log in or use a terminal with your *pacnog* user already logged in and do:

```
$ cd                                    [to go to your home directory]
$ vi temp.txt
```

     vi wil create the file "temp.txt" for you.
     Press the "i" key to switch to input mode.
     Type something like, "VI is great! I think I'll be using vi from now on instead of Word"
     Press <ENTER> to add lines.
     Type some more text

Save the file that you are in. To do this do:

     Press the ESCape key for command mode
     Type ":wq" to save and quite the file (notice the ":" before the "wg"!).

Copy a large file to your home directory so that you can play around with some more vi commands. We'll copy over your /etc/defaults/rc.conf file for this exercise. To do this do:

```
$ cd
$ cp /etc/rsyslog.d/50-default.conf syslog.conf.bak
```

Edit the file, but let's start at the bottom of the file:

```
$ vi + syslog.conf.bak
```

Go to the first line of the file. Notice the colon (":") before the "1".

     :1

Go to line 10, add a new line, and add in some text:

     :10
     Press the "o" key

Add the following text:

     ##
     ## A sample comment
     ##

Delete the three lines you just created:

     Move to the first line of new text
     Press the ESCape key
     Press "dd" to delete a line, repeat until the text is gone

Practice copying and pasting text.

Go to line 10, copy 10 lines of text, go to the bottom of the file and place the text there:

```
ESC
:10
10yy
G
p
```

If want to undo this you would type (in command mode):

```
u
```

Go to the top of the file and replace all occurrences of "mail" with "smtp", but prompt for each change:

```
ESC
:%s/mail/smtp/gc
```

Say "yes" or "no" to a few prompts then escape from this mode by pressing ctrl-c and <ENTER>.

Go to line 1, search for "*emerg*", move to the end of the line and add some text:

```
ESC
:1
/emerg
SHIFT-A
"text here"
ESC
```

2.) PRACTICE, PRACTICE, PRACTICE

As you should be able to see vi is *extremely* powerful as an editor, but not necessarily intuitive. The best way to get good at using vi is to practice.

Make sure you are logged in as *pacnog* on whatever virtual terminal you wish to use. Then do the following:

```
$ cd
$ vi syslog.conf.bak
```

In this file practice some of the following items:

```
Moving around:
        By word
        End of line
        Start of line
        Top of file
```

           Bottom of file
           To an absolute line number
Copying and pasting multiple lines (use vi commands)
Copying and pasting single lines (use vi commands)
Copying and pasting multiple lines (use your mouse buffer)
Copying and pasting single lines (use your mouse buffer)
Search for items backwards and forwards
Replacing text

And, anything else you wish to practice.

3.) REPEAT EXERCISES 1 and 2 USING another editor, like *nano*