Please use `delmar` to do all the exercises.

1   Basic Unix Commands

1. Find out who is currently logged into the system.

2. Find out all the options available with `who(1)`. Can you understand all of them?

2   Unix file system

1. Change directory to `˜bhatias`. Remember the name of the directory you transferred from. You will need it later.

2. Find out the names of all files present in this directory.

3. Read the contents of a file of your choice.

4. Go to the parent of the current directory you are in. What is your working directory now?

5. Go back to your home.

6. Copy a file from my directory to your home directory.

7. Make a copy of the file you just brought in.

8. Rename the copy to `foo`.

9. Delete the file `foo`.

10. What is the UNIX command to copy a directory and all its contents in a different directory?

3   Using vi

1. Create a subdirectory named `vi_work` in your home.

2. Create a large file by using the `man` pages of your favorite command. For example, the man page for the command `sort` can be created by

```
man sort | col -b > sort_man
```

Practice cursor movement and screen movement on this file.

3. Change to the subdirectory `vi_work`. Create a new file called `fun_stuff`. Write an essay that should fill the screen. Practice insert, save, and quit.

4. Edit the file `sort_man` (created above) and practice using simple search forwards and backwards. Look for the following patterns:

    ```
    options UMSL editor encryption usage environment
    ```

5. Change all occurrences of the word "directory" to "folder"

6. Move first six lines to the bottom of the file.

7. Merge first two lines with the join command.

8. Edit the file `sort_man` and temporarily configure the editor to display line numbers, show mode, and set the readonly flag. Then make a change to the file and try to save it. What happens?

9. Edit the file `sort_man` beginning at line number 21 and perform the following operations:

    (a) Check the position of the cursor on the screen using `^G`.
    (b) Set the line number display option.
    (c) Scroll backwards half a screen and delete the current line.
    (d) Use the dot command to delete a second line.
    (e) Recover the second deleted line after line number 50.
    (f) Recover the first deleted line after line number 75.
    (g) Write lines 5-21 to a new file called `new.sort_man`
    (h) Repaint the screen using `^L`.
    (i) Go back to the beginning of the file and include the file `new.sort_man` into the current file `sort_man`

10. Edit the file `sort_man` and perform the following yank/put and search/replace operations:

    (a) Yank lines 36-38 and copy them back at the end of the file.
    (b) Place the cursor near the middle of the file[1]. Then yank a total of 25 lines (including the current line) into the default buffer. Replace these lines at the current cursor position.
    (c) Replace the first occurrence of `Day` with `Holiday`.
    (d) Globally replace all occurrences of the word `vi` with `visual`.
    (e) Practice other search and replace commands.
    (f) Practice yanking into named buffers.
    (g) Practice using put from named buffers.

11. Open at least three files (possibly by saving three man pages of your choice), perform the same search in the files, and practice moving back and forth in files. Also practice copy and paste using named buffers across the files.

12. Create a new file and practice executing shell commands from within the editor. Capture the results of some shell commands into the file.

13. Create an abbreviation `hd` to expand to `holiday`. Use the abbreviation while typing in the input mode.

14. Edit one of your files and assign some text markers at specific characters as well as beginning of line.

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[1] You may have to find the total number of lines in the file to do this.