Part 1: Basic Utilities and commands. (23 points)

Change your directory to the home directory (cd ~), and then create a new directory named as “hw2” (mkdir hw2). After that, go to directory hw2 (cd hw2) and please download a test file by the following command (internet access required):

```
wget cs.gsu.edu/~ylong4/2014fall/csc3320/files/CSC_Course.txt
```

Be sure it succeeds using “ls” to see the file name “CSC_Course.txt” listed.

Then please write the commands you will issue to complete the following tasks and answering corresponding questions step by step.

1) Use **cat** to display the content in CSC_Course.txt.

2) Count the characters, words and lines in CSC_Course.txt.

3) Open the manual page for command **cat**.

4) What is the option for numbering the output lines?

   Quit the manual page.

   Display CSC_Course.txt again with line numbers.

   Can you see the first line for CSC_Course.txt? If yes, what is the first line (**attach a screen shot**)?

5) Use **more** to display CSC_Course.txt.
Can you see the first line for CSC_Course.txt? If yes, what is the first line (attach a screen shot)?

Quit the display.

6) What is the difference between cat and more command?

7) Output the first 10 lines of "CSC_Course.txt".

8) Output the last 10 lines of "CSC_Course.txt".

9) Display the file type for “CSC_Course.txt”.

10) Display the long listing information for directory HW2.

11) Rename the parent directory HW2 as CSC3320_HW2.

12) Rename “CSC_Course.txt” as “Course.txt”.

13) Create a new folder "Backup" and copy “Course.txt” into this folder with a new name “Course.backup”.

14) Check the file permissions for “Course.txt”.

15) What is the meaning for each bit in the file permissions for file “Course.txt”.

16) For file “Course.txt”, add write permission for group, and remove read permission from other with using octal number.

17) For file “Course.txt”, add read and write permission for all without using octal number.
Part2: Vi editing. (11 points)

Please write the commands you will issue to complete the following tasks and answering corresponding questions step by step.

1) Use vi to open “Course.txt”.

2) Display line number.

3) Move the cursor to line 29 col 1, what do you see in this line?

4) Search the string "CSC2310". Which line is this string located?

5) Delete the current line.

6) Substitute all "CSC" with "Computer Science".

7) Copy three lines between line 29 and 31 to the end of the file.

8) Delete three lines between line 17 and 19.

9) Describe how to enter the edit mode and key in "All Courses:" as the first line of the file.

10) Switch back to command mode.

11) Save the file and quit vi.

Submission:

• Upload an electronic copy (MS word or pdf) of your answer sheet to the folder named “HW2” of the dropbox in the desire2learn system.

• Please add the homework number and your name at the top of your answer sheet.

• Name your file in the format of HW2_FirstnameLastname (eg. HW2_YuanLong.docx, HW2_YuanLong.pdf)