In the name of Allah
Iran university of sience and technology
Operating Systems (Spring 2013)
Computer Assignment#1
Due date: 92/01/16

In the following exercises, you will learn how to write shell scripts in Unix or Linux

1- Write a shell program to create a subdirectory and copy /etc/passwd file on it.
   a. Extract all login names, user names and their corresponding home directories from the copied file in a list and store the result in a temp file.
   b. For all extracted login name in a, extract related process information currently in the system and write result in another temp file.
   c. Display result from b in the screen.
   d. Now, sort results in b based on the memory usage and display them on the screen.
   e. With getting a prompt from the user, delete the directory you have created and temp file and exit the shell program.
2- Implement wc (work count) of Unix. Then, use your program to write a shell script to examine the content of some files and show the result in a nice format with appropriate headers. Then, sort the result based on the size of file and show the result in the screen with a nice format.
3- Write a shell program to examine who have logged in the system during the last day and which command(s) s/he has executed. Then, send am email to each user which contains when they have logged in and which command(s) they have executed and some other information which you like. You can get the email addresses of users from a file.

Useful commands: mkdir, cp, awk, cat, echo, sort, read, ps, rm, date, expr, last, cut, mail, lastcomm