Lab sheet 2 - Shell programming (Unix commands)

1. Write a shell script to accept the text from keyboard until a special symbol for End of file is encountered, write it into a file and count the no. of lines in it.
2. Write a shell script to generate emails in the given format and write it into a file. Your script should accept sender and recipient email id's and subject as command line arguments.

   From: abc@domain1.com
   To: xx@domain.com
   Cc: yy@domain.com
   Subject: Subject 1
   This email is generated by my shell script.
   Thanks and regards
   S4 CSE student
   Amritapuri
3. In Question 2 allow user to enter text at the beginning of email content, by passing it as a command line argument.
4. Write a shell script to
   a. write the name and permissions of all files within a given directory recursively into a file. {If the directory is not present the error message should be print on to terminal. Your script may overwrite the file if it is already existing}
   b. Make your script for question 4 print the error message also to terminal.
5. Write a shell script to
   a. Accept a file as input and extract all the words containing 'a' and display it in sorted order.
   b. Accept a file as input and extract all the words starting with letter 's' and display it in sorted order.
   c. Accept a file as input and extract all the words whose second letter is 'a' and display it in sorted order.
6. Write a shell script to find all process running in background, bring any one of the process to foreground and execute it and kill another one. [Before executing your script run two or more processes in background using & operator and see the difference]
7. Write a shell script to extract
   a. File name of the current script
   b. Process number of the current shell
   c. Process number of last background command
   d. Exit status of last executed command
8. Extract nice value of all processes and reset any one.
9. Using function write a shell script to find gcd of two numbers.
10. Using Recursion find factorial of a number?

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