

# Laboratory Assignments

## Subject: Design of Operating Systems

### Subject code: CSE 4049

#### Assignment 1: Familiarization with basic Commands in Linux Operating System and Shell Programming

##### Objective of this Assignment:

- To study the basic commands such as who, who am i, date, cal, pwd, man, mkdir, cd, rmdir, cat, mv, cp, rm, wc, sort, head, tail, cmp, diff, ls, chmod, echo for accessing files and directories.
- To learn basic concepts of shell programming

1. Write a shell script named as **dtcal** for displaying both the system date and calendar for current month in the given format:-

Date : system date

Calender : current calendar

(Make the script an executable file and run it as a command using its name only.)

2. Write a shell script named as **nvwc** which will display the filename and linecount, wordcount and char count of the file dtcal in the following format:

Filename: dtcal

Line count: -

Word count: -

Charcount: -

(Make the script an executable file and run it as a command using its name only.)

3. Write a shell script named as **nvwc2** which will display the filename and linecount, word count and char count of **any file** given as argument to nvwc2 in the following format:

filename	linecount	wordcount	charcount
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file1	-	-	-
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(Make the script an executable file and run it as a command using its name only.)

4. Write a shell script named as **systeminfo** that will display the information about the login name of the user, name of the Unix system used by the user, type of the SHELL used by the user, path of current working directory of the user.  
(Make the script an executable file and run it as a command using its name only.)
5. Write a shell script named as **darg** to display the total number of command line arguments along with the first two arguments.  
-Modify the script to display all the arguments.  
(Make the script an executable file and run it as a command using its name only.)
6. Write a shell script named as **ndisp** that will take three command line arguments specifying the value of n, m and a filename and display the first n number of lines and last m number of lines of the file given as argument.  
(Make the script an executable file and run it as a command using its name only.)