Laboratory Assignment 2 Subject: Design Principles of Operating Systems

Subject code: CSE 3249

**Assignment 2: Familiarization with basic Commands in Unix Operating System and Shell Programming**

**Objective of this Assignment:**

* To learn basic concepts of shell programming
* To lean concept of command line argument in shell script.

1. Write a shell script named as **prog** for merge the content of files a.txt, b.txt, and c.txt sort them and save the result in a file called **result** and display the sorted output on the screen.

(Note: a.txt, b.txt and c.txt file contain some numerical value. Make the script an executable file and run it as a command using its name only.)

1. 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, Path of current working directory of the user and list of file contain in current working directory. (Make the script an executable file and run it as a command using its name only.)
2. Write a shell script named as **dtcal** for displaying both the system date and calendar for specific month, say march 2022, in the given format:-

Date : specific date Calender : current calendar

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

1. 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: - Charcout: -

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

1. 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 |
| file1 | - | - | - |

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

1. 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.)

1. 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.)