ASSIGNMENT – 2

"Familiarization with basic Commands in Unix Operating System and Shell Programming"

Objective of this Assignment:

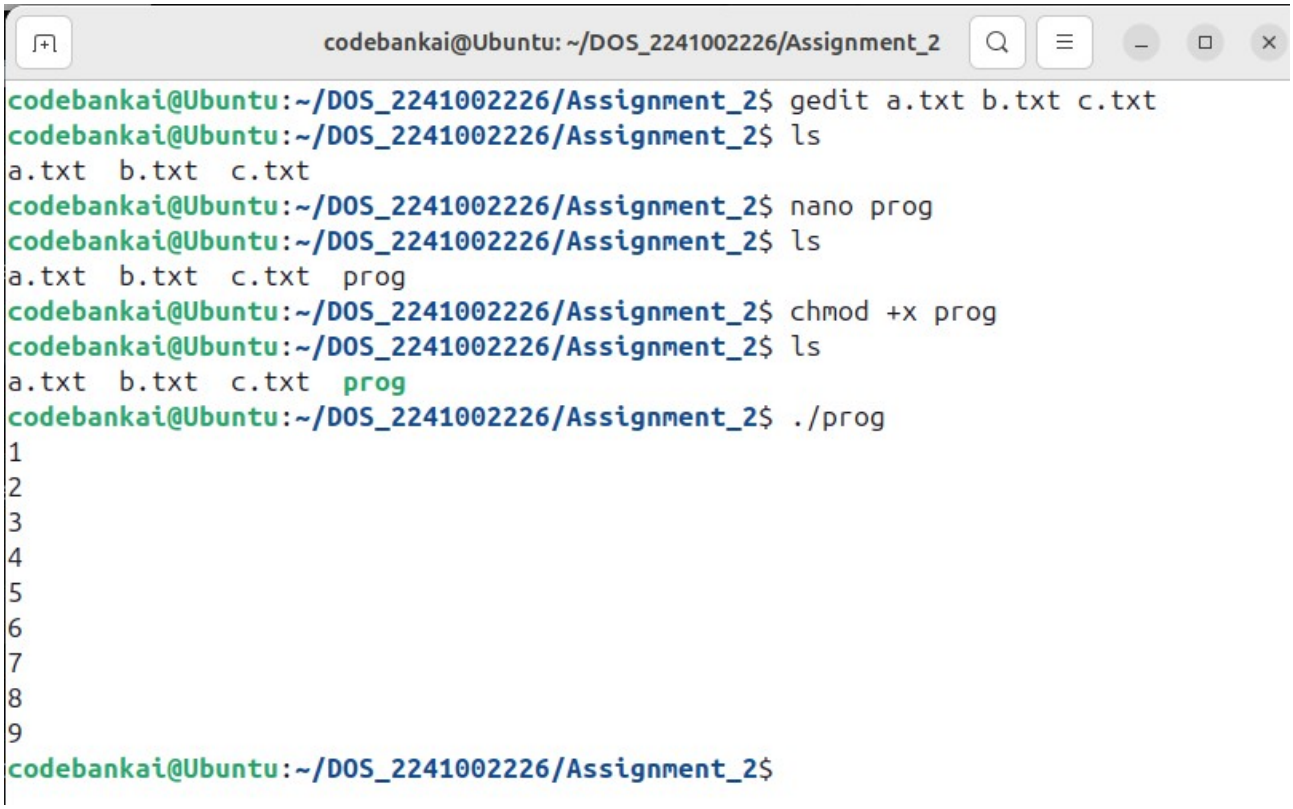
• To learn basic concepts of shell programming
• To lean concept of command line argument in shell script.

Questions And Answers:

Q1) 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.)

Ans :
gedit a.txt b.txt c.txt
ls
nano prog
ls
chmod +x prog
./prog

OUTPUT :

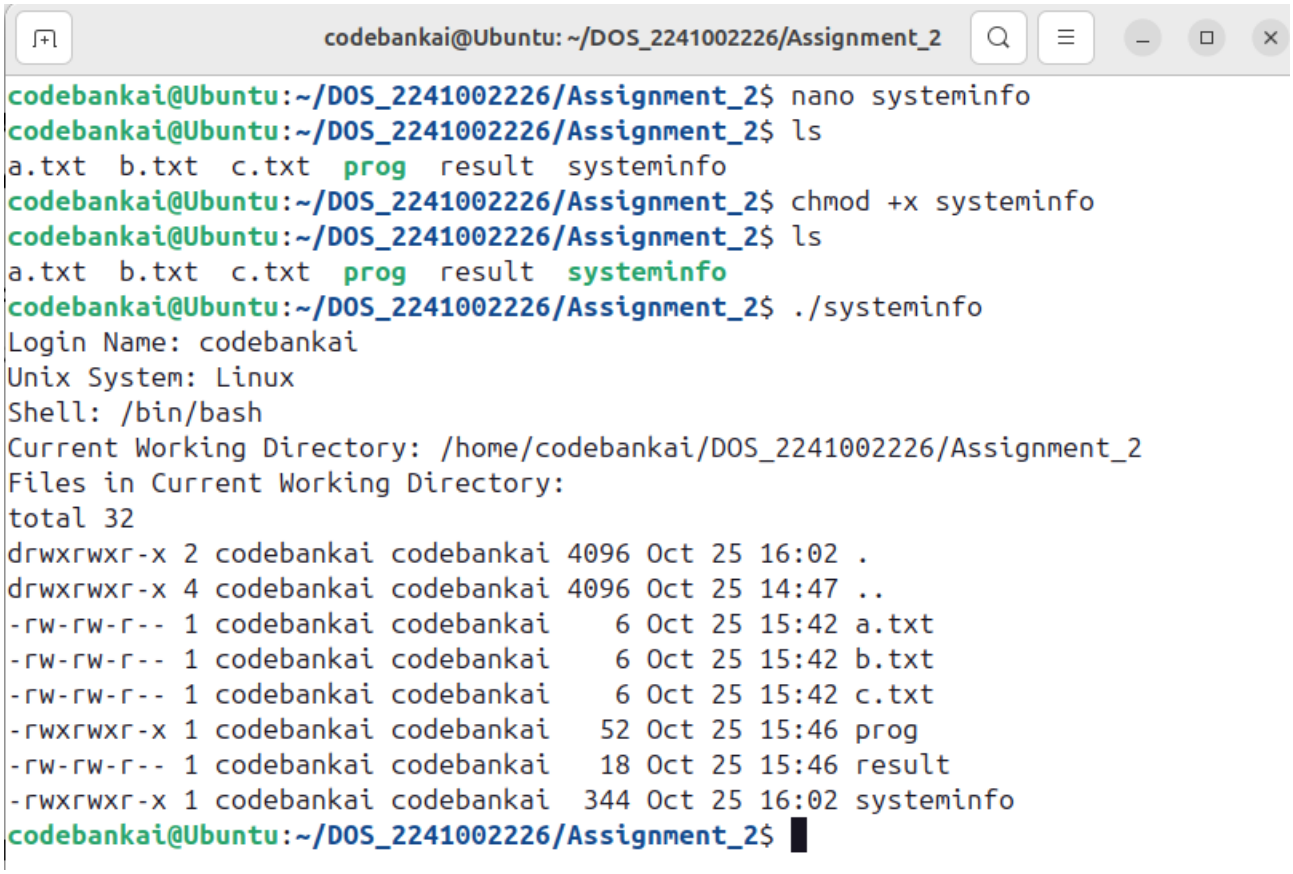


Q2) Write a shell script named as systeminfo that will display the information about the login name of the user, name of the Unix system used by the user, type of the SHELL, Path of current working directory of the user and list of file contain in current
working directory. (Make the script an executable file and run it as a command using its name only.)

Ans)

```
nano systeminfo
echo "Login name of the user: $USER"
echo "Name of the Unix system: $(uname)"
echo "Type of shell: $SHELL"
echo "Path of current working directory: $(pwd)"
echo "List of files in current working directory:"
ls
```

OUTPUT :

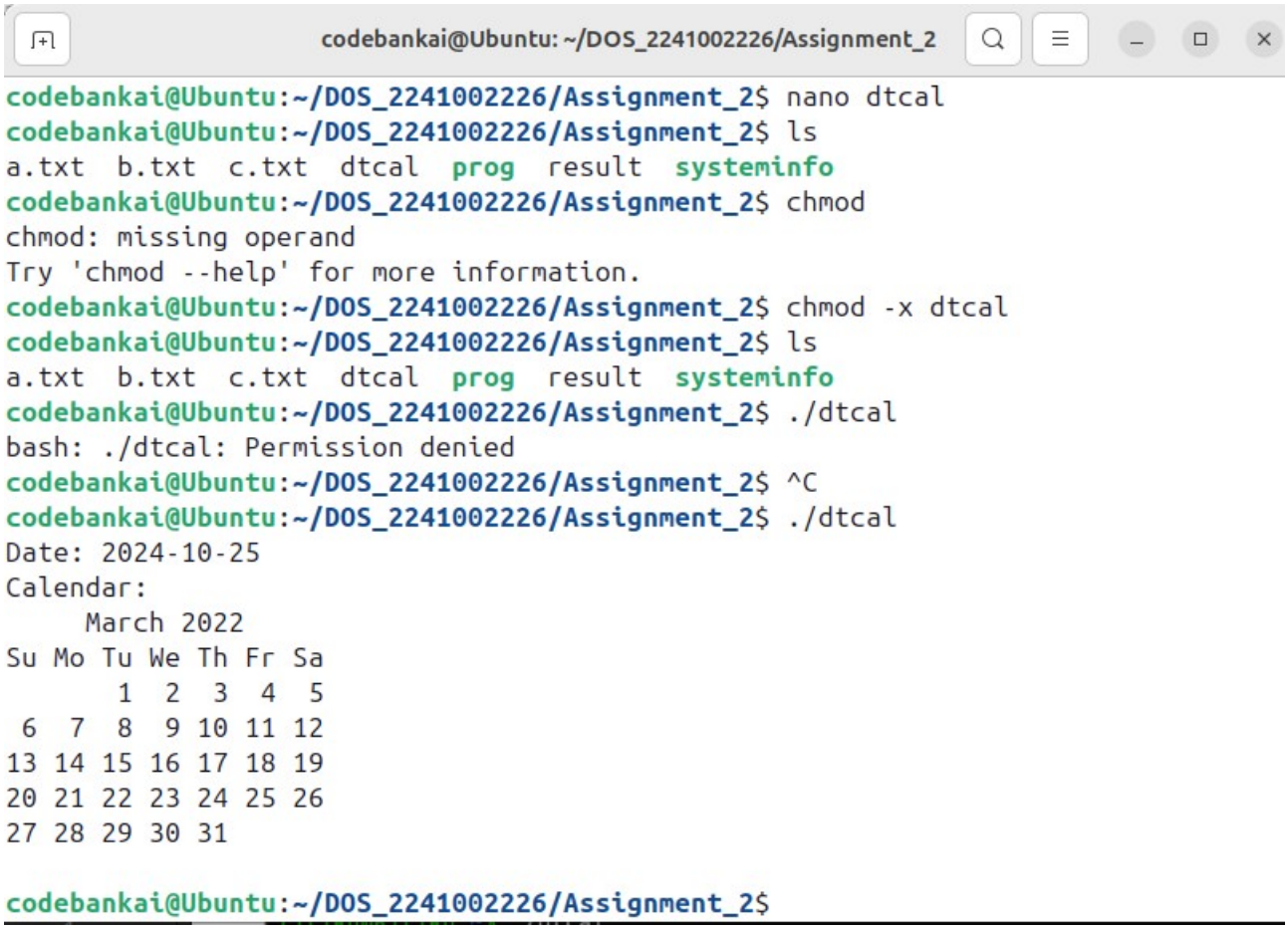


Q3) Write a shell script named as dtcal for displaying both the system date and calendar for specific month, say march 2022, in the given format:- Date : specific date Calender : current calendar (Make the script an executable file and run it as a command using its name only.)

Ans)

nano dtcal
echo "Date : $(date '+%Y-%m-%d')"
echo "Calendar :"
cal 10 2024

OUTPUT :

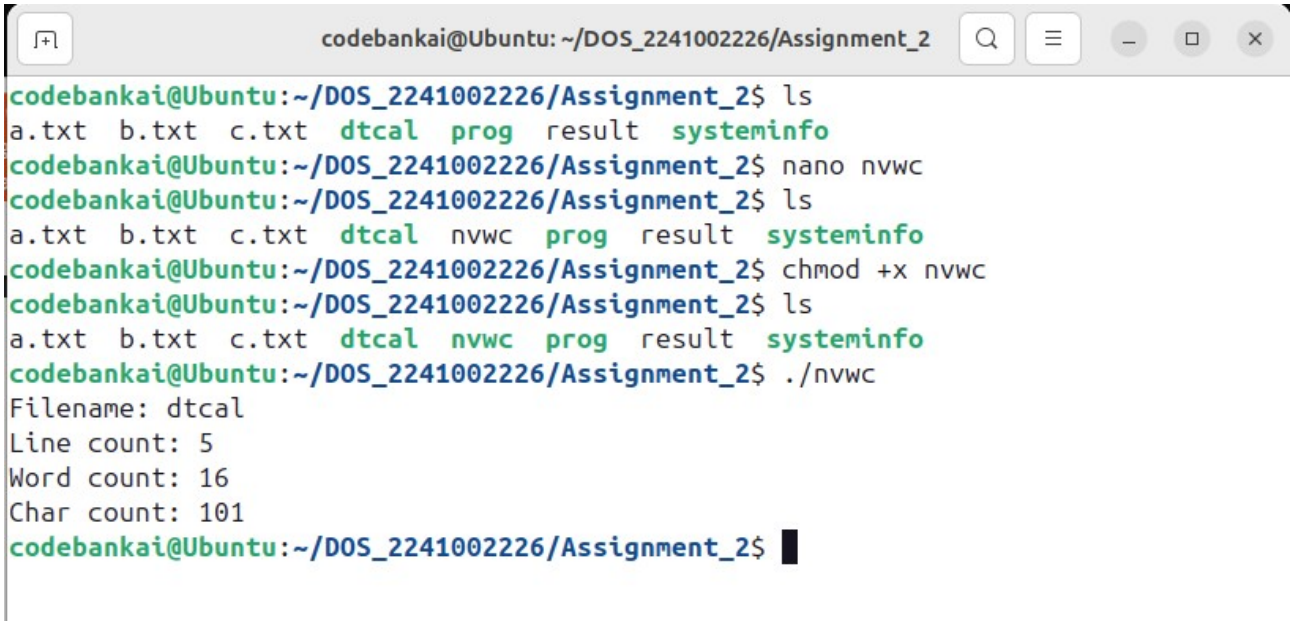


Q4) Write a shell script named as nvwc which will display the filename and linecount, wordcount
and char count of the file dtcal in the following format: Filename: dtcal Line count: - Word count: -
Charcout: - (Make the script an executable file and run it as a command using its name only.)

Ans)

```
nano nvwc
filename="dtcal"
if [ -f "$filename" ]; then
echo "Filename: $filename"
echo "Line count: $(wc -l < $filename)"
echo "Word count: $(wc -w < $filename)"
echo "Char count: $(wc -m < $filename)"
else
echo "File $filename does not exist."
fi
```

OUTPUT :

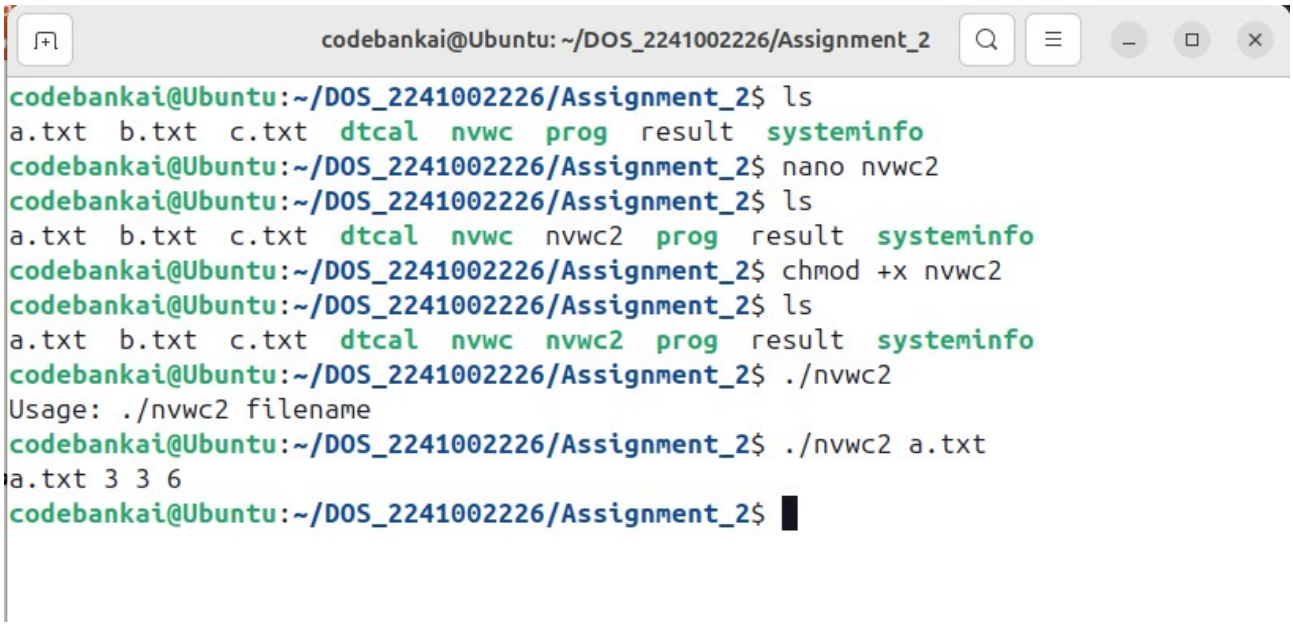


Q5) Write a shell script named as nvwc2 which will display the filename and linecount, word count
and char count of any file given as argument to nvwc2 in the following format: filename linecount
wordcount charcount file1 - - - (Make the script an executable file and run it as a command using its
name only.)

Ans)

```
nano nvwc2
if [ -f "$1" ]; then
filename="$1"
linecount=$(wc -l < "$filename")
wordcount=$(wc -w < "$filename")
charcount=$(wc -m < "$filename")
echo "$filename $linecount $wordcount $charcount"
elseecho "File $1 does not exist."
fi
```

OUTPUT :



Q6) 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.)

Ans)

echo "Total number of arguments: $#"
if [$# -ge 2]; then
echo "First argument: $1"
echo "Second argument: $2"
else
echo "Less than two arguments provided."
fi
Ctrl +x then y then enter
chmod +x darg
./darg arg1 arg2 arg3
MODIFICATION :
nano darg
echo "Total number of arguments: $#"
echo "Arguments: $@"
Ctrl +x then y then enter
./darg arg1 arg2 arg3 arg4

OUTPUT :