

OSL Assignment 1(A)

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Class: TE-9

Batch: M9

Title: Study of Basic Linux Commands

echo

used to display line of text/string that are passed as an argument

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ echo Hello
World
Hello World
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ a=5
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ echo $a
5
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

ls

List all items present in specified directory

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ ls
/home/kumar
anaconda3          Documents          package.json       Templates
Android            Downloads          package-lock.json  Videos
AndroidStudioProjects eclipse-workspace  Pictures
Desktop            Music              Public
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

pwd

returns the present working directory

cd

used to change current working directory

```
(base) kumar@pop-os:~/Desktop$ cd /home/kumar/Desktop/OS
(base) kumar@pop-os:~/Desktop/OS$ pwd
/home/kumar/Desktop/OS
(base) kumar@pop-os:~/Desktop/OS$
```

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ cd ..
(base) kumar@pop-os:~/Desktop/Shell_scripts$
```

touch

used to create, change and modify timestamps of a file

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ touch  
file.txt  
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ ls  
abc.txt  Assig1.sh  file.txt  Records.txt  test.sh  test.txt
```

cat

Cat(concatenate) reads data from the file and gives their content as output. It helps us to create, view, concatenate files

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ cat nums.txt  
10  
23  
14  
5  
13  
77  
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

sort

This command is used to sort a file line by line, arranging the records in a particular order. By default, the sort command sorts file assuming the contents are ASCII

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ cat nums.txt  
10  
23  
14  
5  
13  
77  
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ sort nums.txt  
10  
13  
14  
23  
5  
77  
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ sort -n  
nums.txt  
5  
10  
13  
14  
23  
77  
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

pipe (|)

Combine commands one after another (pipelining)

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ date
Thu Sep 16 10:43:48 PM IST 2021
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ date|cut -d"
" -f4
10:43:51
```

chmod

Change mode of file. Used to modify permissions on file

Types of Users: Owner, Group, User

r = 4 (read), w = 2 (write), x = 1 (execute)

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ chmod 765
test.sh
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ sh test.sh
Enter roll number of entry: 201
1
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

grep

It stands for Globally search Regular Expression. The grep filter searches a file for a particular pattern of characters, and displays all lines that contain that pattern. The pattern that is searched in the file is referred to as the regular expression

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ cat file2.txt
Ramesh
Shyam
Priya
Rahul
Shlok
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ grep -i "ra"
file2.txt
Ramesh
Rahul
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

sed

stands for stream editor and it can perform lot's of function on file like, searching, find and replace, insertion or deletion. Though most common use of SED command in UNIX is for substitution or for find and replace. By using SED you can edit files even without opening it, which is much quicker way to find and replace something in file, than first opening that file in VI Editor and then changing it

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ cat file2.txt
Ramesh
Shyam
Priya
Rahul
Shlok
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ sed
"s/Ra/HH/g" file2.txt
HHmesh
Shyam
Priya
HHhul
Shlok
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$
```

man

Shows manual of specified command

```
(base) kumar@pop-os:~/Desktop/Shell_scripts/OS_Assignments$ man echo
DESCRIPTION
    Echo the STRING(s) to standard output.

    -n      do not output the trailing newline

    -e      enable interpretation of backslash escapes

    -E      disable interpretation of backslash escapes (default)

    --help  display this help and exit

    --version
            output version information and exit

    If -e is in effect, the following sequences are recognized:

    \\      backslash

    \a      alert (BEL)

    \b      backspace

    \c      produce no further output

    \e      escape

    \f      form feed
```

`\n` new line

`\r` carriage return

`\t` horizontal tab

`\v` vertical tab

`\0NNN` byte with octal value NNN (1 to 3 digits)

`\xHH` byte with hexadecimal value HH (1 to 2 digits)

NOTE: your shell may have its own version of echo, which usually
su-
persedes the version described here. Please refer to your
shell's
documentation for details about the options it supports.

AUTHOR

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REPORTING BUGS

GNU coreutils online help:

`<https://www.gnu.org/software/coreutils/>`

Report any translation bugs to

`<https://translationpro-
ject.org/team/>`

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SEE ALSO

Full documentation `<https://www.gnu.org/software/coreutils/echo>`
or available locally via: `info '(coreutils) echo invocation'`

GNU coreutils 8.32

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ECHO(1)

Conclusion:

We learned to use basic Linux commands