

Session 1

cat, wc, sort, bc, head, tail

Standard I/O (Input, Output)

Input – read

Output – echo

Input – User Input (Terminal)

Output – Screen (Terminal)

Redirection – Instead of Standard I/O we are using files.

> (O/P)

< (I/P)

<< (Here Document)

>> (Append output to existing file)

<<< (Here String)

0 – Standard Input (Default)

1 – Standard Output (Default)

2 – Standard Error

2 > &1 --> Error is redirected to output

1 > &2 -> Output is redirected to error

Pipe (|) -> One output is input to other command

Session 2

Change mode/permissions

chmod +x filename

chmod 777 filename

user or owner, group, others

r – read

w – write

x – execute

Symbolic Modes (u, g, o, r, w, x, a, +, -)

Absolute Modes

File

Directory

Read – Listing Contents

Write – Modify or creating files in the directory

Execute – To change directory

Absolute Mode

r – 4

w – 2

x – 1

664 (File)
775 (Directory)

777
- 111

666
- 002

664

0 – No permissions

1 – x

2 – w

3 – w + x

4 – R

5 – r + x

6 – r + w

7 – r + w + x

777
002

775

Session 3

Links

Hard Link

Soft Link

md5sum, cksum, sha1sum

sha1sum sha256sum sha512sum shasum

sha224sum sha384sum

sha2-family --> sha512sum, sha224

sha3 Family

cksum -> 32-bit

md5sum 128-bit

sha1sum -> 160-bit