

# Linux

- Linux is an OS
- Open source OS built on Linux Kernel
- Commands
  - **LS** - list all files and directories in particular folder
  - **LS - l** - Detailed info about files and directories
    - first field shows whether the files is directory or normal or socket or link file
    - month date time
    - - stand for normal fil
    - **s** socket
    - **l** link file
    - first read write executes is for user
    - **r-** - means group
    - next set for others
    - read write execute are file permissions
    - next column is 1 which gives us link
    - next field id owner of file
    - displays group also
    - next is size
    - and modified date and time
  - **LS -a** - hidden directories and files
  - **LS - t** - display most recent modified first
  - **LS - r** - reverse order

- **LS - S** - sizes in bytes
- **LS - R** - detailed information recursive
- **cd** - change directory
- **cd /** - go back to root directory
- **pwd** - present working directory shows present
- **cd dir1/dir2/dir3** - move into sub directory
- **cd ~** - go back to home or cd
- **cd . .** - Parent and child directory
- **mkdir** - Creates a directory give along with name mkdir aroha
- **touch** - create a file without any conten
- **cat - > file name**
- **history** - show all commands typed
- **man ls** - shows all command
- **echo** will display which is typed with echo hi will display hi
- **grep** - search for particular word or string in a file
  - **grep -i** string /wordfile file name
  - **grep -n** string /word file\_name (along with line number)
- **ls -l**
- User permission
- read - 4, write -2 ,execute -1
- user -u ,group -g ,other -o ,all- a
- **chmod** - change mod to change access permission of files and directories
- eg **chmod g+wx** filename **+** is give permission **-** is revoke permission.
- **r+w = 4+2** rw-
- **chown** - to change owner
- **chgrp** - change group

- **less** - to read starting content from very big data
- **top** - shows
- **head** - first part
- sed (stream editor) - substitution or to find replace
  - sed s /word to search/words to replaced /sed demo
- awk search one or more

