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**Week: 1**

1. **cd**  -> change directory
2. **pwd**  -> present working directory
3. **ls**  -> list the files in the current directory

**ls -l**  -> list the files but in long listing (detailed manner)

**ls -a**  -> list the files including hidden files.

**ls -la**  -> list the files including hidden file but in long listing.

1. **cal**  -> shows the calender (current month).

**cal 2 2023** -> shows the calender but of specific month and year.

**cal 2023** -> shows the whole calender of 2023 year.

**cal 1**  ->

#Bonus calender in matrix range from from 1 - 9999

1. **date**  -> current date and time (respect to server)
2. **who** -> people connected to the same node.
3. **w**  -> detailed view of the who command including the server up-time.
4. **whoami** -> current username
5. **who am i**  -> same thing as who but just for us.
6. **clear**  -> clears the screen.
7. **exit**  -> logout from matrix.

**logout** -> same thing

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**Week: 2**

1. **tree** -> show the tree view of current present working directory.

**tree -C** -> it shows the tree but in color.

1. **mkdir** -> make directory.

**mkdir** **-p** -> create parent and sub/child directories both.

1. **rmdir** -> remove directory (empty).
2. **rm** -> remove file.

**rm -r** -> remove directory (including non-empty) and file.

1. **cp** -> copy files.

**cp -r**  -> copy directories (including empty and non-empty) and files.

1. **mv** -> move files or directories (both empty and non-empty).

**# -i** Prompt for confirmation if the destination path exists. can be used with cp mv rm.

1. **touch**  -> create text file.
2. **vi** -> text editor.

**ESC**  -> command mode.

**i**  -> insert mode.

**:w** -> Save.

**:x**  -> Save and exit.

**:q**  -> exit if no changes made.

**:q!**  -> exit & discard any changes.

1. **nano**  -> text editor.
2. **cat** -> text reader.

**more**

**less**

**head**

**tail**

1. **file** -> tell the type of file. (Helpful for the files which don’t have any e
2. **find**  -> search for the files in a directory hierarchy.

Ex: find ~ -name “output.txt”

1. **diff**  -> compare files line by line.

**diff f1 f2 -y** -> compare two files side by side.

1. **sort** -> sort lines of text file.
2. **uniq**  -> omits same lines.
3. **grep**  -> matches the pattern.

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**Week: 3**

1. **Absoulute path ->** /home/pgarg13/slg/output.txt
2. **Relative path** -> output.txt
3. **Relative to home path** -> ~/slg/output.txt
4. **File name expansions**
   1. **\*** -> 0 or more characters
   2. **?** -> exactly one character(any)
   3. **[ ]** -> one character from the range
   4. **[! ]** -> except those characters in the range
5. **echo** -> display a line of text.

**echo red** -> display text red.

**echo red\*** -> show the files starting with red.

**echo $USER** -> show current username.

**echo '\* $USER \*'** -> display \* $USER \* //single quotes strong quotes

**echo “\* $USER \*”** -> display \* pgarg13 \* // double quotes weak quotes

1. **fc** -l -> list previous 16 commands
2. **history** -> list all the commands