**BASH SCRIPTING**

Bash is a scripting language which allows users to automate, execute commands and manage system operations. To create a shell script the extension should be **.sh**

* Commands for shell scripting

1. **Touch**: - to create a file
2. **Vi/vim**: - To open the file if already created. If it is not created already then it will create a file and opens it
3. **Ls**: - To list the files
4. **Ls -ltr**: - to list the files with time stamp
5. **Man**: - Describes the functionality of a command
6. **Cat**: - It is used to print the content of the file without opening the file
7. **Sh filename (or) ./filename: -** It is used to execute the file. Which gives the output of the file
8. **Chmod:** - It is useful to grant the permissions of the users. **Ch 🡪 change**
9. **History: -** It is used to get the list of commands that we have used so far
10. **pwd:** - It is used to know in which directory we are at. Stands for **present working directoty**
11. **mkdir: -** It is used to create a directory**(folder).** Stands for **make directory**

* Shell scripting must start with **#!/bin/bash** 🡪 **(#!/) it is called as shebang**
* **Bash/dash/sh/ksh** 🡪 **these are called executables**
* **Previously sh will automatically redirect to bash using linking concept, but now sh is redirecting to dash as default**
* **Echo: - It is used to print something**
* **To write something in a file** first we need to go to insert mode, we can achieve that by **(click on esc then click on i)**
* **To save the file** we need to **(click on esc and enter :wq!)**
* **To exit from the file without saving** we need to **(click on esc and enter :q!)**
* **:wq! 🡪 to save the file and exit**
* **:q! 🡪 exit from the file without saving**
* **Chmod** has 3 categories

1. What are the permissions for a root user **(you)**
2. Which group has access **(your group)**
3. What are your permissions **(all users)**

**Linux uses chmod as 4, 2, 1 manner which says**

**4 as read**

**2 as write**

**1 as execute**

* **If we give chmod 777 then you, your group and all users has permission for read, write and execute the file**
* **If we give chmod 774 then you and your group has permission to read, write and execute but for all users it will be only read permission**