Shell scripting :-

Manual → Automation

shell scripting is used to do automate the day-to-day (basis) task in system eg. Linux system. For example, to create multiple files.

> touch [Filename]

To create file

> ls

To list files and folders in current directory.

> ls -ltr

It will show more info. about files / folders.

> man [command-name]

To show about manual of command.

eg.> man ls

> man touch

Bydefault any Linux system already have these basics commands.

> vi [Filename]

To open file for writing like notepad in window If file not created then it will automatiedlly created.

> vi first-shell-script.sh

```
#!/bin/bash
    ksh
    dash
    sh
```

This is known as shebang.
We need to mention ~~about~~ in shell script, this is the executable that we will used to execute shell script.

→ one of the most widely used is bash shell.

→ There are some slightly syntactical difference between all of them.

Difference between #!/bin/sh & #!/bin/bash.

previously both were same. If we used #!/bin/sh then system automatically link with bash shell with linking concept.

But now a days, some of the os used dash as default shell. so if we used #!/bin/sh then it will link to dash shell.

BASH SHELL SCRIPTING

#!/bin/bash → shebang.

echo "my name is sawrabh"

↳ TO print something on console.

> cat first-shell-script.sh

To print the content of the file.

TO execute script we need to give permission. For this chmod command is used.

> chmod 777 first-shell-script.sh

> sh first-shell-script.sh
> ./first-shell-script.sh

} to run shell script.

chmod ---------- [filename]

owner | Group | other

Read - 4

Write - 2

Execute - 1

For example,

> chmod 444 [filename]

To give read power only

> history

To know the previously run commands.

> clear

To clear the console.

> pwd

To know the present working directory.

> mkdir [foldername]

To create directory / folder.

> cd [foldername]

To go that particular folder.

> cd ..

To go one backward.

cd stands for change directory.

It is good practice to write comments in shell script to know more about script.

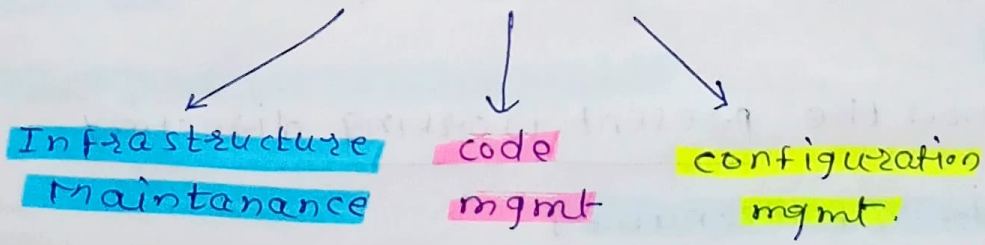
> # comments

To write comments.

simple shell script.

```
#!/bin/bash
# create a folder
mkdir saurabh
# create two files
cd saurabh
touch firstfile secondfile.
```

Role of shell scripting in devops



For example,
If we have 1000's VM and want to track/ monitory usage of CPU, RAM, storage then we can use shell scripting.

> nproc

To know about CPU

> free

To know about RAM.

> top

To know about all processes with usage of CPU, RAM, etc