

Day #4 Task :

1. Explain in your own words and examples, what is Shell Scripting for DevOps ?
 - Shell scripting is a technique in which a programmer writes a series of commands in a shell script file, which is then executed by a shell interpreter. It allows users to automate repetitive tasks, perform complex operations, and control the functionality of the operating system and its various utilities.

A shell script is a text file that contains a series of shell commands. When the script is executed, the commands are processed in the order they are written, one after the other. The shell interpreter reads the script line by line and executes the commands as if they were entered directly on the command line.

Shell scripts can be used for a wide range of tasks, such as:

- Automating system administration tasks, such as managing files and directories, managing users and permissions, and managing system services
- Running backups and other scheduled tasks
- Automating the deployment and rollback of code changes
- Automating the scaling of resources
- Collecting and analyzing log files
- Performing complex operations such as data processing, text manipulation, and more

Some of the popular shells used for scripting include Bash, Zsh, and PowerShell. Bash is the most commonly used shell in Linux and macOS, while PowerShell is used in Windows.

Shell scripting is widely used in different fields like systems administration, network administration, software development and many more. It is a powerful tool that allows you to automate repetitive tasks, perform complex operations, and control the functionality of the operating system and its various utilities.

2. What is `#!/bin/bash`? can we write `#!/bin/sh` as well?
 - **`#!/bin/bash`** this is first line of the script which is also known as **shebang** which tells the system how to execute the scripts
3. Write a Shell Script which prints I will complete #90DaysOfDevOps challenge ?

```
rohitb@localhost:~/shell_script_prac$ cat day4_1.sh
#!/bin/bash
echo "I will complete #90DaysOfDevOps challenge"
rohitb@localhost:~/shell_script_prac$ chmod 755 day4_1.sh
rohitb@localhost:~/shell_script_prac$ ./day4_1.sh
I will complete #90DaysOfDevOps challenge
```

4. Write an Example of If else in Shell Scripting by comparing 2 numbers

```
rohitb@localhost:~/shell_script_prac$ cat day4_2.sh
#!/bin/bash

echo "Hey $1, Welcome to my scripts"
read -p "Enter your age : " name
if [ $name -ge 18 ]
then
    echo "You are an Adult"
else
    echo "You are a Minor"
fi
rohitb@localhost:~/shell_script_prac$ |
rohitb@localhost:~/shell_script_prac$ ./day4_2.sh
Hey , Welcome to my scripts
Enter your age : 26
You are an Adult
rohitb@localhost:~/shell_script_prac$ ./day4_2.sh
Hey , Welcome to my scripts
Enter your age : 17
You are a Minor
```