Shell Script

Shell: CLI (command line interface)which allows to interact with OS.
when you give some command, it interprets your command and run it.
Shell Script:

- **writing multiple commands in series to automate process.**
- **e.g. taking backup or all the files and folders inside one folder**
- **shell script having extension .sh**
- **its a program but execute in shell environment**

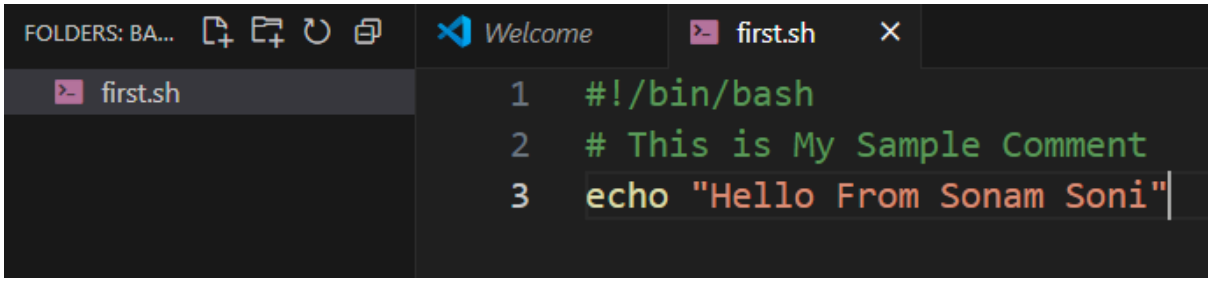
Popular Shells: Bash, Zsh, Ksh, Fish
These are the popular shells inside we can run our shell scripts.

Where we can use shell Scripts?

- Automate some process (backups, deployment)
- DevOps Workflow
- Entire System Management
- Environment Setup

What is Bash?
Bash (Bourne Again Shell) is the most commonly used Unix/Linux Shell
we can create variables,loops, functions, conditions etc..

Let's create one Script
#!/bin/bash
its called Shebang
it tells your system to use Bash Terminal to run script
If you will not write shebang then it will run in default terminal
Comment in Script: Non executable statement called comment
We can just use them for documentation/ understanding of code




```
NEW@DESKTOP-4F8ELLU MINGW64 /d/PhysicsWalla/Devops-March/Github/ShellScripting/b
asics-day-9 (main)
$ ls
first.sh*

NEW@DESKTOP-4F8ELLU MINGW64 /d/PhysicsWalla/Devops-March/Github/ShellScripting/b
asics-day-9 (main)
$ sh first.sh
Hello From Sonam Soni
```

Variables::

In bash Variables is named location in memory which is used to store data temporary while executing script.

Special Variables

These variables already available no need to create and they have some special meanings

Special Variables

$0 giving Script Name

$# giving No of Arguments you have passed

$@ show all arguments

$? showing status of exit

$1,$2,$3 to access individual arguments

Means let's say i want to create one script which take 2 file names source and destination copy the the content

then how to take those file names from user?

we can take help of special variables where pass 2 arguments

sh copy.sh source.txt dest.txt

here total 2 arguments

$0 : name of the file: copy.sh (script name)

$# : total arguments : 2

$@ show all arguments: source.txt dest.txt

$? showing exit status of your program if 0 means program executed successfully, if 1 means exited with error

$1 first argument : source.txt

$2 second argument : dest.txt