Reference Sites :

https://www.tutorialspoint.com/unix/shell\_scripting.htm

https://linuxconfig.org/bash-scripting-tutorial-for-beginners

A **Shell** provides you with an interface to the Unix system. It gathers input from you and executes programs based on that input. When a program finishes executing, it displays that program's output.

Shell is an environment in which we can run our commands, programs, and shell scripts. There are different flavors of a shell, just as there are different flavors of operating systems. Each flavor of shell has its own set of recognized commands and functions.

## Shell Prompt

The prompt, **$**, which is called the **command prompt**, is issued by the shell. While the prompt is displayed, you can type a command.

Shell reads your input after you press **Enter**.

## Shell Types

n Unix, there are two major types of shells −

* **Bourne shell** − If you are using a Bourne-type shell, the **$** character is the default prompt.
* **C shell** − If you are using a C-type shell, the % character is the default prompt.

The Bourne Shell has the following subcategories −

* Bourne shell (sh)
* Korn shell (ksh)
* Bourne Again shell (bash)
* POSIX shell (sh)

The different C-type shells follow −

* C shell (csh)
* TENEX/TOPS C shell (tcsh)

The original Unix shell was written in the mid-1970s by Stephen R. Bourne while he was at the AT&T Bell Labs in New Jersey.

shell is usually installed as /bin/sh on most versions of Unix

## Shell Scripts

The basic concept of a shell script is a list of commands, which are listed in the order of execution. A good shell script will have comments,

shell scripts have

variable

conditional

read and write file

and several operations

## Shell Comments

You can put you comments in your script as follows

# Author : Zara Ali

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# Script follows here:

pwd

ls

echo “what is the shell”

Save the above content and make the script executable −

$chmod +x test.sh

The shell script is now ready to be executed −

$./test.sh

## Variable Names

The name of a variable can contain only letters (a to z or A to Z), numbers ( 0 to 9) or the underscore character ( \_).

By convention, Unix shell variables will have their names in UPPERCASE.

The following examples are valid variable names −

\_ALI

TOKEN\_A

VAR\_1

VAR\_2

Following are the examples of invalid variable names −

2\_VAR

-VARIABLE

VAR1-VAR2

VAR\_A!

The reason you cannot use other characters such as !, \*, or - is that these characters have a special meaning for the shell.