**\*\*\*\*\*\*\*\*\*\*\*\*SHELL SCRIPTING\*\*\*\*\*\*\*\*\*\*\*\*\*\***

* Shell script are interpreted /interface between user and kernel.
* Scripting is a group of tasks combined together to perform some task.
* sh stands for Bourne shell.
* Bash stands for Bourne again shell.
* Where bash is located to see that command which bash.
* #!/bin/bash -🡪to locate the script and also before start writing the script we need to include this command than we need to write scripting
* Simple example:- #!/bin/bash

Ech “Hello World”

Save and exit 🡪 command is esc:wq

Then check by typing ./script name.sh

Demo example :- mkdir dir than inside dir create one script with.sh using vi editor and than use upper commands.

* What are variables ?

**Variables** are the containers which stores some data inside them.

In linux/unix there are two types of variables one is **system variables** and other is called **user variables**.

**System variables** are created and maintained by linux/unix operating system.

This are predefined variable which are defined by linux operating system.

Standard convention is this are the variables defined in capital cases.

**User variables** are created and maintained by us and this are generally lower cases but there is no street rule to right is lower cases u can right in lower cases.

**System variables in linux**

**A list of the commonly used variables in Linux**

|  |  |  |
| --- | --- | --- |
| **System Variable** | **Meaning** | **To View Variable Value Type** |
| BASH\_VERSION | Holds the version of this instance of bash. | echo $BASH\_VERSION |
| HOSTNAME | The name of the your computer. | echo $HOSTNAME |
| CDPATH | The search path for the cd command. | echo $CDPATH |
| HISTFILE | The name of the file in which command history is saved. | echo $HISTFILE |
| HISTFILESIZE | The maximum number of lines contained in the history file. | echo $HISTFILESIZE |
| HISTSIZE | The number of commands to remember in the command history. The default value is 500. | echo $HISTSIZE |
| HOME | The home directory of the current user. | echo $HOME |
| IFS | The Internal Field Separator that is used for word splitting after expansion and to split lines into words with the read builtin command. The default value is <space><tab><newline>. | echo $IFS |
| LANG | Used to determine the locale category for any category not specifically selected with a variable starting with LC\_. | echo $LANG |
| PATH | The search path for commands. It is a colon-separated list of directories in which the shell looks for commands. | echo $PATH |
| PS1 | Your prompt settings. | echo $PS1 |
| TMOUT | The default timeout for the read builtin command. Also in an interactive shell, the value is interpreted as the number of seconds to wait for input after issuing the command. If not input provided it will logout user. | echo $TMOUT |
| TERM | Your login terminal type. | echo $TERM export TERM=vt100 |
| SHELL | Set path to login shell. | echo $SHELL |
| DISPLAY | Set X display name | echo $DISPLAY export DISPLAY=:0.1 |
| EDITOR | Set name of default text editor. | export EDITOR=/usr/bin/vim |

User variables examples.

Example #!/bin/bash

Echo ‘‘Enter name : ”

Read name -🡪read means input will be saved in this variable ex name.

Echo “entered name : ‘’ $name”

Save and run the script