

# UNIT - IV

## SHELL

## PROGRAMMING

# What is shell?

Shell is an interface in linux architecture that interact with kernel directly and also interact through applications with user indirectly.

Shell is a program used to interpret and manage commands

## FUNCTIONS OF SHELL

The shell provides a way to run programs, work with the file system, compile computer code, and manage the computer.

# What is shell script?

Normally shells are interactive.

It means shell accept command from you (via keyboard) and execute them.

But if you use command one by one (sequence of 'n' number of commands), then you can store this sequence of command to text file and tell the shell to execute this text file instead of entering the commands. This is know as ***shell script***

# YOU CAN SAY

## shell script/shell procedure/shell program

### Some definitions of shell script:

Shell script is executable text file that contains linux or unix commands.

Shell script is a program typed by user and executed by shell and kernel.

Shell script is the method of executing commands which are stored in file.

when a group of command have to be executed regurly,they should be stored in file,and the file itself is executed as a shell script or shell program

*Shell Script is series of command written in plain text file.*

## How to Create shell script/shell procedure/shell program?

We can create shell script using following steps.

1. Open terminal

2. Open vi with shell script name and “.sh” extension.

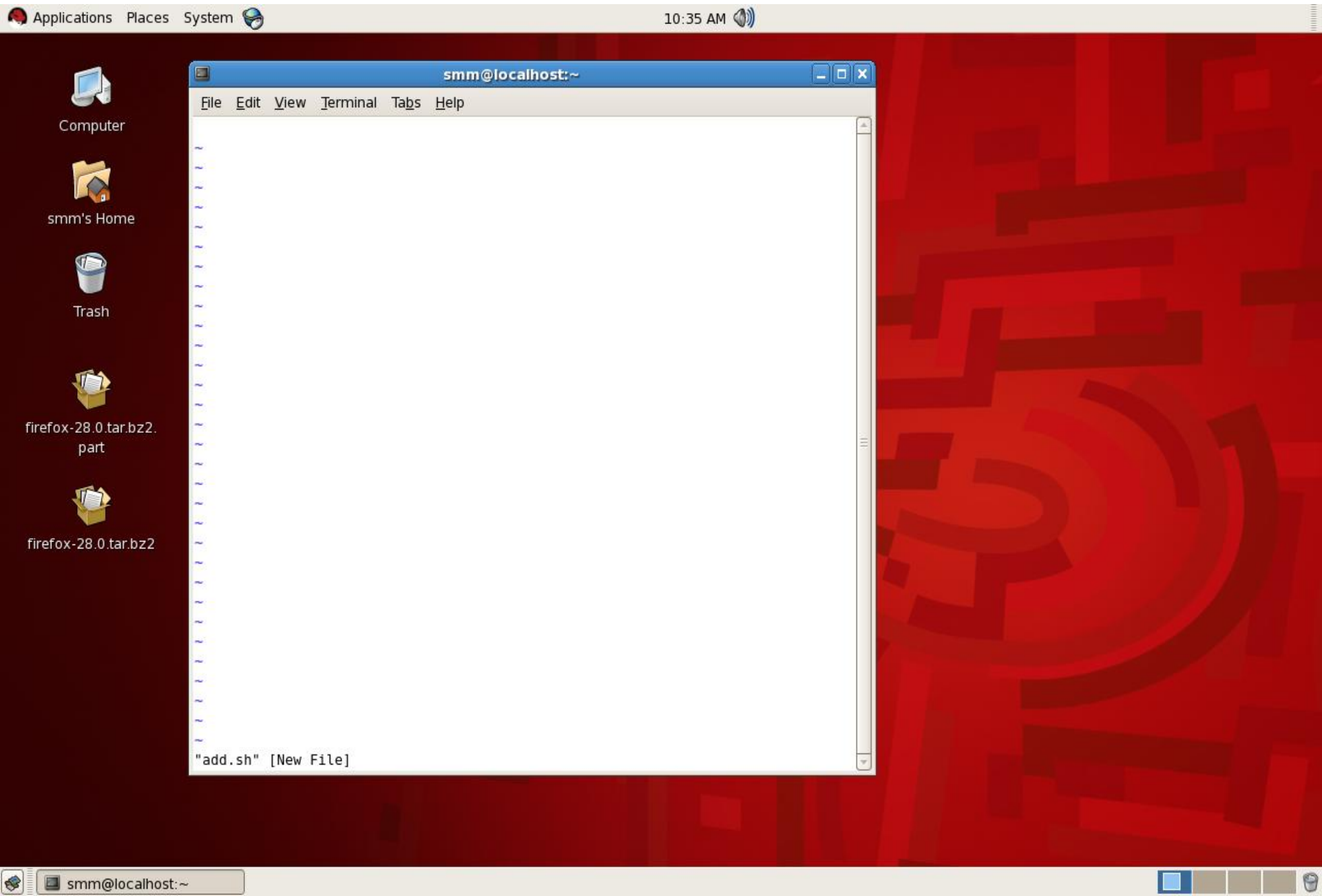
Syntax: `$ vi filename.sh`

Ex. In terminal ,type following command to create and open shell script.

`$ vi add.sh` and press ENTER

3. The shell script will open with each line starting with tilde character and last line showing script filename as "`add.sh`" [New File]. The cursor will be blinking in first line at start.

When shell script opened to create in terminal. It looks like following figure .



4.To type command we should go to insert mode of vi editor, hence press “i”.

5.Type your commands of shell script.

6.After completion of typing command press ESCAPE to go out from insert mode.

7. To save script and close vi editor type,

`:x` and press enter

8.To close vi without saving script type,

`:q` and press enter

9.To execute shell script,go to command mode of vi and type shell script name with “sh” command.

syntax to execute shell script

\$ sh filename.sh and press enter

Ex. \$ sh add.sh and press enter

If u want to edit shell script,again open shell script,then make change.Save and close script by `:x` and execute script.

# Why to Write Shell Script ?

- Shell script can take input from user, file and output them on screen.
- Useful to create our own commands.
- Save lots of time.
- To automate some task of day to day life.
- System Administration part can be also automated