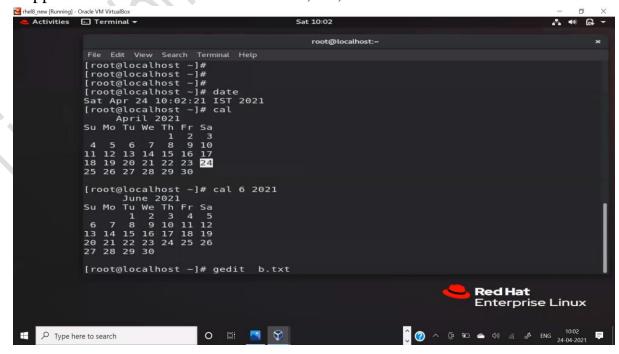## Shell and Shell Scripting Session No.1.1

- Starting with the Operating System (Linux), there are mainly two ways to interact with the OS which are, CLI and GUI. CLI = Command Line Interface & GUI = Graphical User Interface.
- Since GUI is a heavy program that requires more RAM and CPU, so to increase efficiency and save resources, we generally remove GUI in real-world environments and mostly work with CLI.
- CLI is the black screen or terminal where the user enters the command for interacting with OS, like date, cal, ifconfig.
- But when a user enters the command, actually there is a program running behind the scenes that receives that command, processes it, and gives the output. That program is known as **"SHELL"**.
- There are a lot of shells available in the market like csh, sh, and bash, but the motto of every shell is the same, and among those "bash" is the standard shell so in this training we are going to use the bash shell.
- In the industry there are many requirements we have to do or perform like performing backup every day or twice a day. So for this, we have certain commands that need to be run again and again. And running these commands manually is not good practice and also it take lots of time.
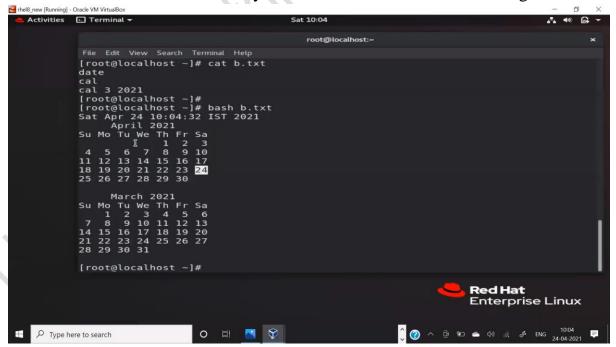- Suppose we have three command dates, cal, cal 6 2021

- And we need to run this command again and again so what can we do here, we can create a file and write all the steps or commands we need to run for a particular use case. Like here we create a file and write these 3 commands in it.

- And now we can run this file only to run all these commands in one go.

- This file is known as "script", just like for a movie we have a script for that movie and everything happens as per that script. Similarly, this file will perform the entire operation at one time.
- This process is known as scripting, and the shell we use is bash so Finally the topic we are learning is "Bash Shell Scripting"