

1. In your own words, describe what `ls /proc` is. Why is it here? What if you just type `/proc`?

`proc` is an abbreviation for process information which is a pseudo-filesystem that is created when the system is up. It lists the on-going information related to processes, memory and some hardware configuration.

`proc` is special as it is a virtual file system. You could check your system's memory using `/proc/meminfo`. You could also dive down into what are the PID that is running. That check that directory. For example, if I see `PID = 12` in my `ls /proc`, I can then do `cd /proc/12` then use `ls` command to see all the files. I then can view the file by using `cat /proc/12/some_file` as. These are just an example, so we could do a lot of things with `/proc` command.

If we only type `/proc`, it will give us the bash: `/proc: Is a directory`. Therefore, we could `cd` to `/proc`.

2. In your own words, describe the `top` command.

`top` command is used to show the Linux processes. It gives a real-time dynamic view of all the systems that are running. It lists the

- PID: process ID,
- USER,
- PR: priority,
- NI: nice value of task,
- VIRT: total virtual memory used,
- RES: resident size or the actual physical memory that is consuming,
- SHR: shared memory size (kb),
- S: current state of each process,
- %CPU: percentage of CPU usage,
- %MEM: percentage of memory usage,
- TIME+: time CPU spent running each process,
- COMMAND: command used to initialize each process.

3. In your own words, describe the `ps` command.

`ps` command is used to list the current processes. It lists

- PID: process ID
- TTY: terminal that executes the command – `TeleTYpewriter`
- TIME: time CPU spent running the particular process
- CMD: command that initializes the process

4. In your own words, describe the `kill` command.

`kill` command is used to kill a particular process by specifying the process id. It kills the process by sending the signal to end it. By default, it is a `SIGTERM` signal. We also can specify the termination type or kill types too by doing the `kill <signal value> <process id>`.

To check the signal type, we could use `kill -l`.