

Date

```
sazzad@umar13:~$ date  
Sun Aug 27 12:47:50 UTC 2023
```

uptime

gives a one-line display of the following information:

- The current time.
- How long the system has been running.
- How many users are currently logged on.
- The system load averages for the past 1, 5, and 15 minutes.

Examples

```
uptime
```

Displays system uptime information. Output resembles the following:

```
08:11:22 up 146 days, 34 min, 3 users, load average: 0.28, 0.45, 0.38
```

The following is a breakdown of what the above output means.

08:11:22	The current system time is 8:11 A.M. (and 22 seconds).
up 146 days, 34 min	The system has been up for 146 days and 34 minutes.
3 users	Three user sessions are active on the system.
load average: 0.28, 0.45, 0.38	The average CPU load for the last 1, 5, and 15 minutes is 0.28, 0.45, and 0.38, respectively. The number represents a percentage of full CPU load, where zero is no load, and 1.00 is full load. A number greater than 1.00 indicates that the CPU has been asked more than it can do in real time, and some tasks will wait for CPU time. For example, if the average CPU load is 1.70, the CPU is taxed at 170%. That is, 70% of the current processes will be forced to wait at any given time.

Hostname

1 See the hostname

```
Hostname
```

2 Change the hostname

```
Sudo hostnamectl set-hostname newhostname
```

3. Sudo reboot

We can also change hostname by editing the following file

Vi /etc/hostname

Uname

The command 'uname' displays the information about the system.

Uname

More details

Uname -a

Where the file located

Which pwd

```
sazzadul@haque:~/Desktop$ which pwd
/usr/bin/pwd
```

Ps

Linux provides us a utility called ps for viewing information related with the processes on a system which stands as abbreviation for "Process Status". ps command is used to list the currently running processes and their PIDs along with some other information depends on different options.

```
sazzadul@sazzadul-VirtualBox:~/Desktop$ ps
```

PID	TTY	TIME	CMD
2296	pts/0	00:00:00	bash
2337	pts/0	00:00:00	ps

The following information is provided in the aforementioned output.

- **PID:** The process ID of the highlighted process
- **TTY:** Displays the name of the terminal that you're using
- **TIME:** The time allotted to the process by the CPU
- **CMD:** The command that is responsible for launching the process

List All Processes

To get a list of all the processes on a Linux system, use the **-A** or **-e** flag with the default ps command.

```
ps -A  
ps -e
```

List Down Currently Running Processes

To get a list of the processes that are currently running on your system, pass the **-ax** flag with the ps command. The **-a** stands for **All**.

```
ps -ax
```

To get detailed information related to the processes, pass the **-ef** or **-eF** option with the command.

```
ps -ef  
ps -eF
```

The above-mentioned output contains the following information about processes.

- **UID:** The user ID of the user responsible for the process
- **PID:** The process ID of the entry
- **PPID:** The process ID of the parent process
- **C:** CPU usage and scheduling information related to the process
- **STIME:** Time when the process was started
- **TTY:** The name of the terminal that you're currently using
- **TIME:** Amount of CPU time used by the process
- **CMD:** The command which executed the process

Get a List of Processes Related to a User

The **-u** option displays a list of all the processes started by a specific user.

```
ps -u username
```