

S.NO	COMMANDS	SUB DETALIS	DESCRIPTION	REMARK
1	top	definition	The top (table of processes) commands shows a real-time view of running processes in linux . the command also provided a system infirmation summary that shows resource utilization,including CPU and memory usage.	
		Time	system time	
		System up time	How long has our system been running	
		User	How many users can the system have	
		Load averges	How much load is coming on our system	
		Task Information	2 are currently running, 318 are in a sleeping state, and there are no stopped or zombie processes.	
		CPU Usage	This represents the percentage of CPU time (in this case, 00.0%) used by user-level processes .	
		CPU system	This indicates the percentage of CPU time (0.0%) used by system processes (kernel-level tasks).	
		CPU Idle	This shows that 74.2% of the CPU time is idle. In other words, the CPU is currently not actively processing any tasks and is available for other processes to use.	
		CPU softerwar interrupts	This represents 0.1% of CPU time used for software interrupts (si). Software interrupts are events triggered by software, often used for hardware communication or handling exceptional conditions.	
		Memory Usage	Indicates memory usage statistics.	
		Swap Usage	Indicates swap space usage statistics.	
2	lscpu	definition	The lscpu command provides detailed information about the CPU (Central Processing Unit) of your system.	
		Architecture	This indicates that your system's CPU architecture is 64-bit.	
		CPU op-mode	Your CPU supports both 32-bit and 64-bit operation modes.	
		Address sizes	Your CPU supports 39 bits for physical addresses and 48 bits for virtual addresses, allowing access to a large address space.	
		CPU	No. of CPU define in system	
		Thread(s) per core	Each CPU core supports 2 hardware threads, indicating that your CPU supports Hyper-Threading (HT) technology.	

		Core(s) per socket	There are 2 CPU cores per CPU socket.	
		Socket(s):	Your system has 1 CPU socket.	
		NUMA node	There is 1 NUMA (Non-Uniform Memory Access) node in your system.	
		Vendor ID	Your CPU is manufactured by Intel.	
		CPU family	The CPU family is 6, which is common for Intel processors.	
		Model	Your CPU model is Intel(R) Core(TM) i3-6006U CPU @ 2.00 GHz.	
		CPU MHz	The base clock speed of your CPU is 2.00 GHz.	
		CPU max MHz	The maximum clock speed your CPU can reach is 2.00 GHz.	
		CPU min MHz	The minimum clock speed your CPU can run at is 400 MHz.	
		BogoMIPS	BogoMIPS is a rough measure of CPU speed in terms of million instructions per second (MIPS). In this case, it's approximately 3999.93.	
		Virtualization	Your CPU supports virtualization technology (VT-x).	
		Cache Information	These values represent the sizes of various CPU caches.	
		Vulnerability Mitigations:	Your CPU has various security mitigations in place to protect against vulnerabilities like Meltdown, Spectre, and others.	
		Flags	The "Flags" section lists various CPU features and extensions supported by your CPU.	
3	free -h	definition	The free -h command output provides information about your system's RAM (memory) and swap space:	
		Total	system has a total (GiB) of RAM.	
		Used	Currently, GiB of RAM is in use	
		Free	About GiB of RAM is free and available for use	
		Shared	megabytes (MiB) of RAM are shared among processes.	
		Buff/Cache	GiB is used for buffer/cache purposes, which can be quickly released if needed.	
		Available	Approximately GiB of RAM is available for use by applications.	
		Regarding swap space:		
		Total	Your system has a total of (GiB) of swap space.	

		Used	Currently, GiB of swap space is in use.	
		Free	There is GiB of free swap space.	
4	systemctl --type=service	definition	The command systemctl --type=service is used to list the services that are currently loaded and their status.	
		parameters		
		accounts-daemon.service	Manages user account information.	
		acpid.service	Handles ACPI (Advanced Configuration and Power Interface) events.	
		alsa-restore.service	Handles ACPI (Advanced Configuration and Power Interface) events.	
		anydesk.service	Runs the AnyDesk remote desktop service.	
		apache2.service	Manages the Apache HTTP Server.	
		apparmor.service	Loads AppArmor security profiles.	
		apport.service	Generates automatic crash reports.	
		avahi-daemon.service	Provides mDNS/DNS-SD (Multicast DNS / DNS Service Discovery) functionality.	
		bird.service	Runs the BIRD Internet Routing Daemon for IPv4.	
		bird6.service	Runs the BIRD Internet Routing Daemon for IPv6.	
		blk-availability.service	Ensures the availability of block devices.	
		bluetooth.service	Manages Bluetooth functionality.	
		clamav-daemon.service	Runs the Clam AntiVirus userspace daemon.	
		clamav-freshclam.service	Updates ClamAV virus databases.	
		colord.service	Manages color profiles.	
		console-setup.service	Configures console font and keymap.	
		containerd.service	Manages container runtimes.	
		cri-dockerd.service	Manages Docker containers via CRI (Container Runtime Interface).	
		cron.service	Executes scheduled tasks.	
		cups-browsed.service	Makes remote CUPS printers available locally.	
		cups.service	Manages the Common Unix Printing System (CUPS).	

		dbus.service	Provides inter-process communication via D-Bus.	
		docker.service	Manages Docker containers and services.	
		epmd.service	Runs the Erlang Port Mapper Daemon.	
		finalrd.service	Creates a runtime directory for shutdown pivot root.	
		forticlient.service	Schedules Forticlient tasks.	
		gdm.service	Manages the GNOME Display Manager.	
		grafana-server.service	Runs the Grafana monitoring and dashboard service.	
		ha_cluster_exporter.service	Exports metrics for Pacemaker HA (High Availability) clusters.	
		irqbalance.service	Balances CPU interrupts.	
		kerneloops.service	Collects and submits kernel crash signatures.	
		keyboard-setup.service	Sets the console keyboard layout.	
		kmod-static-nodes.service	Creates a list of static device nodes for the current kernel.	
5	SELinux	definition	SELinux, short for Security-Enhanced Linux, is a mandatory access control (MAC) security mechanism implemented in the Linux kernel. It provides an additional layer of security beyond the traditional discretionary access control (DAC) mechanisms like file permissions.	
	Ping	ping example.com	You can use the ping command to check basic network connectivity	
	telnet	telnet example.com	Use telnet to check if a specific port is open on a remote server	
	nc -vz	nc -vz example.com	Netcat is a versatile networking utility. You can use it to test TCP/UDP connections.	
	nmap	nmap example.com	Nmap is a powerful network scanner that can discover open ports on remote hosts.	
	curl -I	curl -I http://example.com	You can use curl or wget to test web services by making HTTP requests to a specific URL.	
	sudo setenforce 0	Enforcing Mode	This command changes SELinux from enforcing to permissive mode. It takes effect immediately but won't persist across reboots.	
	sudo setenforce 1	Permissive Mode	This command changes SELinux from permissive to enforcing mode. Like the previous command, it doesn't persist across reboots.	

	SELINUX=disabled	Disabled Mode	To disable SELinux permanently, you need to edit the SELinux configuration file, usually located at /etc/selinux/config. Open the file in a text editor and change the SELINUX parameter to:	
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