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| **Command** | **Description** | **Output** |
| ifconfig | ifconfig stands for "interface configuration." It is used to view and change the configuration of the network interfaces on your system. | eth0 Link encap:Ethernet HWaddr 40:a8:f0:44:8a:11  inet addr:8.8.6.7 Bcast:8.8.6.31 Mask:255.255.255.224  inet6 addr: fe80::42a8:f0ff:fe44:8a11/64 Scope:Link  UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1  RX packets:2351 errors:0 dropped:0 overruns:0 frame:0  TX packets:1589 errors:0 dropped:0 overruns:0 carrier:0  collisions:0 txqueuelen:1000  RX bytes:2058356 (2.0 MB) TX bytes:197169 (197.1 KB) |
| ping | The ping command is a Command Prompt command used to test the ability of the source computer to reach a specified destination computer. The ping command is usually used as a simple way to verify that a computer can communicate over the network with another computer or network device. | ->ping 8.8.5.1  PING 8.8.5.1 (8.8.5.1)  56(84) bytes of data.  64 bytes from 8.8.5.1: icmp\_seq=1 ttl=64 time=0.184 ms |
| traceroute | Traceroute is a command which can show you the path a packet of information takes from your computer to one you specify. It will list all the routers it passes through until it reaches its destination, or fails to and is discarded. In addition to this, it will tell you how long each 'hop' from router to router takes. | ->traceroute 8.8.5.8  traceroute to 8.8.5.8 (8.8.5.8), 30 hops max, 60 byte packets  1 8.8.6.1 (8.8.6.1) 0.154 ms 0.131 ms 0.118 ms  2 \* \* \*  3 \* \* \* |
| netstat | In computing, netstat (network statistics) is a command-line network utility that displays network connections for Transmission Control Protocol (both incoming and outgoing), routing tables, and a number of network interface (network interface controller or software-defined network interface) and network protocol | |  | | --- | | ->netstat | |  | [ ] STREAM CONNECTED 51456 /var/run/dbus/system\_bus\_socket | |  | unix 3 [ ] STREAM CONNECTED 29073 @/tmp/dbus-9HDrULjDb2 | |  | unix 3 [ ] STREAM CONNECTED 26984 | |
| nslookup | Nslookup (stands for “Name Server Lookup”) is a useful command for getting information from DNS server. It is a network administration tool for querying the Domain Name System (DNS) to obtain domain name or IP address mapping or any other specific DNS record. It is also used to troubleshoot DNS related problems. | ->nslookup google.com |
| hostname | The hostname Command. The hostname command is used to show or set a computer's host name and domain name. A host name is a name that is assigned to a host (i.e., a computer connected to the network) that uniquely identifies it on a network and thus allows it to be addressed without using its full IP address | ->hostname  809f.fragnel.edu.in |
| tcdump | Tcpdump command is a famous network packet analysing tool that is used to display TCP\IP & other network packets being transmitted over the network attached to the system on which tcpdump has been installed. Tcpdump uses libpcap library to capture the network packets & is available on almost all Linux/Unix flavors | ->tcpdump -r 1234.pcap  win 260, options [nop,nop,TS val 1667951355 ecr 210380], length 0  09:21:59.342912 IP 809f.fragnel.edu.in.42653 > 7.1.1.12.3128: Flags [P.], seq 117:141, ack 79, win 1324, options [nop,nop,TS val 210381 ecr 1667951355], length 24  etc etc etc.... |