

OPERATING SYSTEM LAB WEEK-1

SRN: PES2UG23CS272

1. File system navigation linux commands

```
Command Prompt
keerthan@LAPTOP-1LRPIC3M:~$ pwd
/home/keerthan
keerthan@LAPTOP-1LRPIC3M:~$ mkdir Downloads
mkdir: cannot create directory 'Downloads': File exists
keerthan@LAPTOP-1LRPIC3M:~$ ls
Downloads
keerthan@LAPTOP-1LRPIC3M:~$ cd Downloads
keerthan@LAPTOP-1LRPIC3M:~/Downloads$ cd ..
keerthan@LAPTOP-1LRPIC3M:~$ mkdir Documents
keerthan@LAPTOP-1LRPIC3M:~$ ls
Documents Downloads
keerthan@LAPTOP-1LRPIC3M:~$ rmdir Downloads
keerthan@LAPTOP-1LRPIC3M:~$ ls
Documents
keerthan@LAPTOP-1LRPIC3M:~$ cd Documents
keerthan@LAPTOP-1LRPIC3M:~/Documents$ touch file1.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents$ touch file2.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ls Documents
ls: cannot access 'Documents': No such file or directory
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ls
file1.txt file2.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents$ mkdir folders
keerthan@LAPTOP-1LRPIC3M:~/Documents$ cd folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cd ..
cd..: command not found
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cd ..
keerthan@LAPTOP-1LRPIC3M:~/Documents$ mv file1.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ls
file2.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents$ cd folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls
file1.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ touch file1.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cp file1.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls
file1.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ touch file3.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls
```

2. Folder and file manipulation commands:

```
Command Prompt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls
file1.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls -l
total 0
-rw-r--r-- 1 keerthan keerthan 0 Jan 19 15:47 file1.txt
-rw-r--r-- 1 keerthan keerthan 0 Jan 19 15:48 folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ln -s file1.txt link1
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls -l
total 0
-rw-r--r-- 1 keerthan keerthan 0 Jan 19 15:47 file1.txt
-rw-r--r-- 1 keerthan keerthan 0 Jan 19 15:48 folders
lrwxrwxrwx 1 keerthan keerthan 9 Jan 19 15:51 link1 -> file1.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ sudo chmod 664 file1.txt
[sudo] password for keerthan:
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cat file1.txt
hello operating system
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cd ..
keerthan@LAPTOP-1LRPIC3M:~/Documents$ touch file2.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ls
file2.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents$ mv file2.txt folders
keerthan@LAPTOP-1LRPIC3M:~/Documents$ cd folders
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ls
file1.txt file2.txt folders link1
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cat file2.txt
hello world
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ cat file1.txt file2.txt
hello operating system
hello world
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ head file1.txt
hello operating system
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ tail file1.txt
hello operating system
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ more file1.txt
hello operating system
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ less file1.txt
[1]+  Stopped                  less file1.txt
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$
```

3.Installing and removing packages commands:

```
Command Prompt
keerthan@LAPTOP-1LRPIC3M x + v
Admin Country: US
Admin Email: Select Request Email Form at https://domains.markmonitor.com/whois/google.com
Tech Organization: Google LLC
Tech State/Province: CA
Tech Country: US
Tech Email: Select Request Email Form at https://domains.markmonitor.com/whois/google.com
Name Server: ns1.google.com
Name Server: ns2.google.com
Name Server: ns3.google.com
DNSSEC: unsigned
URL of the ICANN WHOIS Data Problem Reporting System: http://rdps.internic.net/
>>> Last update of WHOIS database: 2025-01-10T16:30:36+0000 <<<

For more information on WHOIS status codes, please visit:
https://www.icann.org/resources/pages/app-status-codes

If you wish to contact this domain's Registrant, Administrative, or Technical contact, and such email address is not visible above, you may do so via our web form, pursuant to ICANN's Temporary Specification. To verify that you are not a robot, please enter your email address to receive a link to a page that facilitates email communication with the relevant contact(s).

Web-based WHOIS:
https://domains.markmonitor.com/whois

If you have a legitimate interest in viewing the non-public WHOIS details, send your request and the reasons for your request to whoisrequest@markmonitor.com and specify the domain name in the subject line. We will review that request and may ask for supporting documentation and explanation.

The data in MarkMonitor's WHOIS database is provided for information purposes, and to assist persons in obtaining information about or related to a domain name's registration record. While MarkMonitor believes the data to be accurate, the data is provided "as is" with no guarantee or warranties regarding its accuracy.

By submitting a WHOIS query, you agree that you will use this data only for lawful purposes and that, under no circumstances will you use this data to:
(1) allow, enable, or otherwise support the transmission by email, telephone, or facsimile of mass, unsolicited, commercial advertising, or spam, or
(2) enable high volume, automated, or electronic processes that send queries, data, or email to MarkMonitor (or its systems) or the domain name contacts (or its systems).

MarkMonitor reserves the right to modify these terms at any time.

By submitting this query, you agree to abide by this policy.

MarkMonitor Domain Management(TM)
Protecting companies and consumers in a digital world.

Visit MarkMonitor at https://www.markmonitor.com
Contact us at +1.888.763.2229
In Europe, at +44.2022.2802228

keerthan@LAPTOP-1LRPIC3M: ~/Documents
google.com has address 142.250.182.16
google.com has reverse address 142.250.182.16
google.com mail is handled by 10 smtp.google.com
keerthan@LAPTOP-1LRPIC3M: ~/Documents
LAPTOP-1LRPIC3M
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ netstat -tln
Command 'netstat' not found, but can be installed with:
sudo apt install net-tools
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ sudo apt install net-tools
Reading package lists... Done
Building dependency tree... Done
```

```
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ apt list --upgradable
E: Command line option --upgradable is not understood in combination with the other options
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ apt list --upgradable
Listing... Done
bind9-dnsutils/noble-updates 1:9.18.30-0ubuntu0.24.04.1 amd64 [upgradable from: 1:9.18.28-0ubuntu0.24.04.1]
bind9-host/noble-updates 1:9.18.30-0ubuntu0.24.04.1 amd64 [upgradable from: 1:9.18.28-0ubuntu0.24.04.1]
bind9-libs/noble-updates 1:9.18.30-0ubuntu0.24.04.1 amd64 [upgradable from: 1:9.18.28-0ubuntu0.24.04.1]
git-man/noble-updates,noble-security 1:2.43.0-1ubuntu7.2 all [upgradable from: 1:2.43.0-1ubuntu7.1]
git/noble-updates,noble-security 1:2.43.0-1ubuntu7.2 amd64 [upgradable from: 1:2.43.0-1ubuntu7.1]
libnetplan/noble-updates 1.1.1-1-ubuntu24.04.1 amd64 [upgradable from: 1.0.1-1ubuntu2-24.04.1]
netplan-generator/noble-updates 1.1.1-1-ubuntu24.04.1 amd64 [upgradable from: 1.0.1-1ubuntu2-24.04.1]
netplan.io/noble-updates 1.1.1-1-ubuntu24.04.1 amd64 [upgradable from: 1.0.1-1ubuntu2-24.04.1]
python3-netaddr/noble-updates 1.1.1-1-ubuntu24.04.1 amd64 [upgradable from: 1.0.1-1ubuntu2-24.04.1]
rsync/noble-updates,noble-security 3.2.7-1ubuntu1.2 amd64 [upgradable from: 3.2.7-1ubuntu1]
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ sudo apt install traceroute
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  traceroute
0 upgraded, 1 newly installed, 0 to remove and 10 not upgraded.
Need to get 60.5 kB of archives.
After this operation, 162 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 traceroute amd64 1:2.1.5-1 [60.5 kB]
Fetched 60.5 kB in 1s (42.7 kB/s)
Selecting previously unselected package traceroute.
(Reading database ... 40844 files and directories currently installed.)
Preparing to unpack .../traceroute_1:2.1.5-1_amd64.deb ...
Unpacking traceroute (1:2.1.5-1) ...
Setting up traceroute (1:2.1.5-1) ...
update-alternatives: using /usr/bin/traceroute.db to provide /usr/bin/traceroute (traceroute) in auto mode
update-alternatives: using /usr/bin/traceroute6.db to provide /usr/bin/traceroute6 (traceroute6) in auto mode
update-alternatives: using /usr/bin/lft.db to provide /usr/bin/lft (lft) in auto mode
update-alternatives: using /usr/bin/traceproto.db to provide /usr/bin/traceproto (traceproto) in auto mode
update-alternatives: using /usr/sbin/tcptraceroute.db to provide /usr/sbin/tcptraceroute (tcptraceroute) in auto mode
Processing triggers for man-db (2.12.0-4build2) ...
keerthan@LAPTOP-1LRPIC3M: ~/Documents $ traceroute google.com
traceroute to google.com (142.250.196.46), 30 hops max, 60 byte packets
 1 LAPTOP-1LRPIC3M.ashome.net (172.19.80.1)  0.613 ms  0.567 ms  0.546 ms
 2 192.168.222.228 (192.168.222.228)  4.094 ms  4.007 ms  3.967 ms
 3 * * *
 4 10.71.168.83 (10.71.168.83)  37.980 ms  10.71.168.67 (10.71.168.67)  40.079 ms  39.984 ms
 5 192.168.65.246 (192.168.65.246)  37.527 ms  192.168.65.248 (192.168.65.248)  39.936 ms  192.168.65.246 (192.168.65.246)  39.895 ms
 6 * * *
 7 * * *
 8 * * *
 9 * * *
10 * * *
11 * * *
12 72.14.196.126 (72.14.196.126)  53.049 ms  72.14.217.254 (72.14.217.254)  53.014 ms  46.559 ms
13 * * *
14 74.125.253.12 (74.125.253.12)  46.154 ms  142.250.228.186 (142.250.228.186)  45.511 ms  142.251.49.216 (142.251.49.216)  45.945 ms
15 142.251.230.52 (142.251.230.52)  47.690 ms  142.251.55.31 (142.251.55.31)  47.355 ms  142.251.230.70 (142.251.230.70)  55.195 ms
16 maa03s45-in-f14.1e100.net (142.250.196.46)  34.594 ms  55.127 ms  142.250.239.57 (142.250.239.57)  54.956 ms
keerthan@LAPTOP-1LRPIC3M: ~/Documents $
```

```
Command Prompt x keerthan@LAPTOP-1LRPIC3M x + v
DnsSec: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/eicf/
>>> Last update of whois database: 2025-01-19T16:30:36Z <<<

For more information on Whois status codes, please visit https://icann.org/app

NOTICE: The expiration date displayed in this record is the date the
registrant's sponsorship of the domain name registration in the registry is
currently set to expire. This date does not necessarily reflect the expiration
date of the domain name registrant's agreement with the sponsoring
registrar. Users may consult the sponsoring registrar's Whois database to
view the registrar's reported data of expiration for this registration.

TERMS OF USE: You are not authorized to access or query our Whois
database through the use of electronic processes that are high-volume and
automated except as reasonably necessary to register domain names or
modify existing registrations; the Data in VeriSign Global Registry
Services' ("VeriSign") Whois database is provided by VeriSign for
information purposes only, and to assist persons in obtaining information
about or related to a domain name registration record. VeriSign does not
guarantee its accuracy. By submitting a Whois query, you agree to abide
by the following terms of use: You agree that you may use this Data only
for lawful purposes and that under no circumstances will you use this Data
to: (1) allow, enable, or otherwise support the transmission of mass
unsolicited, commercial advertising or solicitations via e-mail, telephone,
or facsimile; or (2) enable high volume, automated, electronic processes
that apply to VeriSign for its computer systems. The compilation,
repackaging, dissemination or other use of this Data is expressly
prohibited without the prior written consent of VeriSign. You agree not to
use electronic processes that are automated and high-volume to access or
query the Whois database except as reasonably necessary to register
domain names or modify existing registrations. VeriSign reserves the right
to restrict your access to the Whois database in its sole discretion to ensure
operational stability. VeriSign may restrict or terminate your access to the
Whois database for failure to abide by these terms of use. VeriSign
reserves the right to modify these terms at any time.

The Registry database contains ONLY .COM, .NET, .EDU domains and
Registrars.
Domain Name: google.com
Registry Domain ID: 238018-DOMAIN.COM-VIRSI
Registrar WHOIS Server: whois.markmonitor.com
Registrar URL: http://www.markmonitor.com
Updated Date: 2025-08-29T02:17:13Z+0000
Creation Date: 1997-09-15T07:00:00+0000
Registrar Registration Expiration Date: 2028-09-13T07:00:00+0000
Registrar: MarkMonitor, Inc.
Registrar IANA ID: 292
Registrar Abuse Contact Email: abusecomplaints@markmonitor.com
Registrar Abuse Contact Phone: +1-208-807-7080
Domain Status: clientUpdateProhibited (https://www.icann.org/epp/clientUpdateProhibited)
Domain Status: clientTransferProhibited (https://www.icann.org/epp/clientTransferProhibited)
Domain Status: clientDeleteProhibited (https://www.icann.org/epp/clientDeleteProhibited)
Domain Status: serverUpdateProhibited (https://www.icann.org/epp/serverUpdateProhibited)
Domain Status: serverTransferProhibited (https://www.icann.org/epp/serverTransferProhibited)
Domain Status: serverDeleteProhibited (https://www.icann.org/epp/serverDeleteProhibited)
Registrant Organization: Google LLC
Registrant State/Province: CA
Registrant Country: US
Registrant Email: Select Request Email Form at https://domains.markmonitor.com/whois/google.com
Admin Organization: Google LLC
Admin State/Province: CA
Admin Country: US
Admin Email: Select Request Email Form at https://domains.markmonitor.com/whois/google.com
Tech Organization: Google LLC
Tech State/Province: CA
Tech Country: US
Tech Email: Select Request Email Form at https://domains.markmonitor.com/whois/google.com

16 maa03s45-in-f14.1e100.net (142.250.196.46) 34.594 ms 55.127 ms 142.250.239.57 (142.250.239.57) 54.956 ms
keerthan@LAPTOP-1LRPIC3M: ~/Documents$ nslookup google.com
Server:      10.255.255.254
Address:     10.255.255.254553

Non-authoritative answer:
Name:   google.com
Address: 142.250.196.46
Name:   google.com
Address: 2404:6800:4007:82a::200e

keerthan@LAPTOP-1LRPIC3M: ~/Documents$ dig google.com

; <<<> DiG 0 18.28-@ubuntu0.24.04.1-Ubuntu <<<> google.com
;; global options: +cmd
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 25587
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;google.com.                IN      A

;; ANSWER SECTION:
google.com.                59      IN      A      142.250.196.46

;; Query time: 0 msec
;; SERVER: 10.255.255.254#53(10.255.255.254) (UDP)
;; WHEN: Sun Jan 19 16:28:11 UTC 2025
;; MSG SIZE rcvd: 44

keerthan@LAPTOP-1LRPIC3M: ~/Documents$ host google.com
google.com has address 142.250.196.46
google.com has IPv6 address 2404:6800:4007:82a::200e
google.com mail is handled by 10 smtp.google.com.
keerthan@LAPTOP-1LRPIC3M: ~/Documents$ whois google.com
Command 'whois' not found, but can be installed with:
sudo apt install whois
keerthan@LAPTOP-1LRPIC3M: ~/Documents$ sudo apt install whois
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  whois
0 upgraded, 1 newly installed, 0 to remove and 10 not upgraded.
Need to get 51.7 kB of archives.
After this operation, 279 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 whois amd64 5.5.22 [51.7 kB]
Fetched 51.7 kB in 2s (32.0 kB/s)
Selecting previously unselected package whois.
(Reading database ... 40864 files and directories currently installed.)
```

```
Command Prompt x keerthan@LAPTOP-1LRPIC3M x + v
12K folders
keerthan@LAPTOP-1LRPIC3M:~/Document$ crontab --help
crontab: invalid option -- '-'
crontab: usage error: unrecognized option
usage: crontab [-u user] [-n] file
crontab [-u user] [-i] { -e | -l | -r }

    -h      (displays this help message)

    file    (default operation is replace, per 1003.2)
    -n      (dry run: checks the syntax, then bails out)
    -u user  (choose the user whose crontab is touched)

    -e      (edit user's crontab)
    -l      (list user's crontab)
    -r      (delete user's crontab)

    -i      (prompt before deleting user's crontab)
keerthan@LAPTOP-1LRPIC3M:~/Document$ crontab -l
no crontab for keerthan
keerthan@LAPTOP-1LRPIC3M:~/Document$ kill 4236
-bash: kill: (4236) - No such process
keerthan@LAPTOP-1LRPIC3M:~/Document$ pkill -9 firefox
keerthan@LAPTOP-1LRPIC3M:~/Document$ killall -9 firefox
firefox: no process found
keerthan@LAPTOP-1LRPIC3M:~/Document$ top
top - 16:13:38 up 41 min, 1 user, load average: 0.00, 0.02, 0.02
Tasks: 26 total, 1 running, 24 sleeping, 1 stopped, 0 zombie
%Cpu(s):  0.0 us,  0.1 sy,  0.0 ni, 99.9 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem : 7642.3 total, 6891.1 free, 720.6 used, 299.0 buff/cache
MiB Swap: 2048.0 total, 2048.0 free,  0.0 used, 6921.7 avail Mem

  PID USER      PR  NI   VIRT    RES    SHR   S  %CPU  %MEM    TIME+  COMMAND
  81 root        20   0  23972   5936   4788   S   0.3   0.1   0:00.36 systemd-udev
 693 keerthan    20   0   9288   5272   3120   R   0.3   0.1   0:00.03 top
    1 root        20   0 215444 12876   9620   S   0.0   0.2   0:00.98 systemd
    2 root        20   0   2616   1440   1320   S   0.0   0.0   0:00.01 init-systemd(Ub
    6 root        20   0   2652    132    132   S   0.0   0.0   1:08.93 init

Setting up libuv1:amd64 (1.48.0-1.1build1) ...
Setting up bind9-libs:amd64 (1:9.18.28-ubuntu0.24.04.1) ...
Setting up bind9-host (1:9.18.28-ubuntu0.24.04.1) ...
Setting up bind9-dnssutils (1:9.18.28-ubuntu0.24.04.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-ubuntu0.23) ...
keerthan@LAPTOP-1LRPIC3M:~/Document$ sudo apt install traceroute
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Package traceroute is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source
E: Package 'traceroute' has no installation candidate
keerthan@LAPTOP-1LRPIC3M:~/Document$ sudo apt install traceroute google.com
traceroute: command not found
keerthan@LAPTOP-1LRPIC3M:~/Document$ sudo apt update
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble InRelease [126 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [7252 B]
Get:4 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [32.0 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Get:6 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:7 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble/universe amd64 Packages [19.0 MB]
Get:9 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [582 kB]
Get:10 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [381 kB]
Get:12 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
Get:13 http://archive.ubuntu.com/ubuntu noble/multiverse Translation-en [113 kB]
Get:14 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [212 B]
Get:15 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [775 kB]
Get:18 http://archive.ubuntu.com/ubuntu noble-backports/main Translation-en [170 kB]
Get:19 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [151 kB]
Get:20 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
Get:21 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [979 kB]
Get:22 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [242 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [310 kB]
Get:24 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [119.9 kB]
Get:25 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Packages [583 kB]
Get:26 http://archive.ubuntu.com/ubuntu noble-backports/restricted Translation-en [113 kB]
Get:27 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [212 B]
Get:28 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [8328 B]
Get:29 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Packages [16.6 kB]
Get:30 http://archive.ubuntu.com/ubuntu noble-backports/multiverse Translation-en [3840 B]
Get:31 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:32 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [112 B]
Get:33 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [10.7 kB]
Get:34 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [10.6 kB]
Get:35 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [11.7 kB]
Get:36 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [118 B]
Get:37 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [212 B]
Get:38 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:39 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:40 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Fetched 27.1 MB in 41s (666 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
10 packages can be upgraded. Run 'apt list --upgradable' to see them.
keerthan@LAPTOP-1LRPIC3M:~/Document$
```



Command Prompt



keerthan@LAPTOP-1LRPIC3M



```
keerthan@LAPTOP-1LRPIC3M:~/Documents$ traceroute google.com
traceroute: command not found
keerthan@LAPTOP-1LRPIC3M:~/Documents$ nslookup google.com
Command 'nslookup' not found, but can be installed with:
sudo apt install bind9-dnsutils
keerthan@LAPTOP-1LRPIC3M:~/Documents$ sudo apt install bind9-dnsutils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bind9-host bind9-libsl liblmbdb0 libmaxminddb0 libuv1t64
Suggested packages:
  mmbdb-bin
The following NEW packages will be installed:
  bind9-dnsutils bind9-host bind9-libsl liblmbdb0 libmaxminddb0 libuv1t64
0 upgraded, 6 newly installed, 0 to remove and 3 not upgraded.
Need to get 1625 kB of archives.
After this operation, 4641 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Ign:1 http://archive.ubuntu.com/ubuntu noble/main amd64 libuv1t64 amd64 1.48.0-1.1build1
Ign:2 http://archive.ubuntu.com/ubuntu noble/main amd64 liblmbdb0 amd64 0.9.31-1build1
Ign:3 http://archive.ubuntu.com/ubuntu noble/main amd64 libmaxminddb0 amd64 1.9.1-1build1
Ign:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-libsl amd64 1:9.18.28-0ubuntu0.24.04.1
Ign:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-host amd64 1:9.18.28-0ubuntu0.24.04.1
Ign:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-dnsutils amd64 1:9.18.28-0ubuntu0.24.04.1
Ign:1 http://archive.ubuntu.com/ubuntu noble/main amd64 libuv1t64 amd64 1.48.0-1.1build1
Ign:2 http://archive.ubuntu.com/ubuntu noble/main amd64 liblmbdb0 amd64 0.9.31-1build1
Ign:3 http://archive.ubuntu.com/ubuntu noble/main amd64 libmaxminddb0 amd64 1.9.1-1build1
Ign:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-libsl amd64 1:9.18.28-0ubuntu0.24.04.1
Ign:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-host amd64 1:9.18.28-0ubuntu0.24.04.1
Ign:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-dnsutils amd64 1:9.18.28-0ubuntu0.24.04.1
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 libuv1t64 amd64 1.48.0-1.1build1 [97.3 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 liblmbdb0 amd64 0.9.31-1build1 [48.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble/main amd64 libmaxminddb0 amd64 1.9.1-1build1 [24.4 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-libsl amd64 1:9.18.28-0ubuntu0.24.04.1 [1249 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-host amd64 1:9.18.28-0ubuntu0.24.04.1 [50.4 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bind9-dnsutils amd64 1:9.18.28-0ubuntu0.24.04.1 [155 kB]
Fetched 1625 kB in 4min 30s (6018 B/s)
Selecting previously unselected package libuv1t64:amd64.
(Reading database ... 40794 files and directories currently installed.)
Preparing to unpack .../0-libuv1t64_1.48.0-1.1build1_amd64.deb ...
Unpacking libuv1t64:amd64 (1.48.0-1.1build1) ...
Selecting previously unselected package liblmbdb0:amd64.
Preparing to unpack .../1-liblmbdb0_0.9.31-1build1_amd64.deb ...
Unpacking liblmbdb0:amd64 (0.9.31-1build1) ...
Selecting previously unselected package libmaxminddb0:amd64.
Preparing to unpack .../2-libmaxminddb0_1.9.1-1build1_amd64.deb ...
Unpacking libmaxminddb0:amd64 (1.9.1-1build1) ...
Selecting previously unselected package bind9-libsl:amd64.
Preparing to unpack .../3-bind9-libsl_1%3a9.18.28-0ubuntu0.24.04.1_amd64.deb ...
Unpacking bind9-libsl:amd64 (1:9.18.28-0ubuntu0.24.04.1) ...
Selecting previously unselected package bind9-host.
Preparing to unpack .../4-bind9-host_1%3a9.18.28-0ubuntu0.24.04.1_amd64.deb ...
Unpacking bind9-host (1:9.18.28-0ubuntu0.24.04.1) ...
Selecting previously unselected package bind9-dnsutils.
Preparing to unpack .../5-bind9-dnsutils_1%3a9.18.28-0ubuntu0.24.04.1_amd64.deb ...
Unpacking bind9-dnsutils (1:9.18.28-0ubuntu0.24.04.1) ...
Setting up liblmbdb0:amd64 (0.9.31-1build1) ...
Setting up libmaxminddb0:amd64 (1.9.1-1build1) ...
Setting up libuv1t64:amd64 (1.48.0-1.1build1) ...
Setting up bind9-libsl:amd64 (1:9.18.28-0ubuntu0.24.04.1) ...
Setting up bind9-host (1:9.18.28-0ubuntu0.24.04.1) ...
Setting up bind9-dnsutils (1:9.18.28-0ubuntu0.24.04.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
keerthan@LAPTOP-1LRPIC3M:~/Documents$
```

```
Command Prompt x keertan@LAPTOP-1LRPIC3M x + v
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In Europe, at +44.02032862229

keertan@LAPTOP-1LRPIC3M:~/Documents$ host google.com
google.com has address 142.250.182.10
google.com has IPv6 address 2001:4860:4007:82a::200e
google.com mail is handled by 18 smtp.google.com.
keertan@LAPTOP-1LRPIC3M:~/Documents$ hostname
LAPTOP-1LRPIC3M
keertan@LAPTOP-1LRPIC3M:~/Documents$ netstat -tulpn
Command 'netstat' not found, but can be installed with:
sudo apt install net-tools
keertan@LAPTOP-1LRPIC3M:~/Documents$ sudo apt install net-tools
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
net-tools
0 upgraded, 1 newly installed, 0 to remove and 10 not upgraded.
Need to get 204 kB of archives.
After this operation, 811 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 net-tools amd64 2.10-0.1ubuntu2 [204 kB]
Fetched 204 kB in 2s (91.3 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 40875 files and directories currently installed.)
Preparing to unpack .../net-tools.2.10-0.1ubuntu2_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu2) ...
Setting up net-tools (2.10-0.1ubuntu2) ...
Processing triggers for man-db (2.12.0-1build2) ...
keertan@LAPTOP-1LRPIC3M:~/Documents$ netstat -tulpn
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address Foreign Address State
tcp 0 0 10.255.255.254:53 0.0.0.0:* LISTEN
tcp 0 0 127.0.0.53:53 0.0.0.0:* LISTEN
udp 0 0 127.0.0.53:53 0.0.0.0:*
udp 0 0 10.255.255.254:53 0.0.0.0:*
udp 0 0 127.0.0.1:323 0.0.0.0:*
udp6 0 0 :::323 :::*

keertan@LAPTOP-1LRPIC3M:~/Documents$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 172.19.19.192 netmask 255.255.240.0 broadcast 172.19.95.255
inet6 fe80::215:56ff:fe56:5a37 prefixlen 64 scopeid 0x0<link-local>
ether 00:15:5d:26:8a:27 txqueuelen 1000 (Ethernet)
RX packets 12303 bytes 20918497 (20.9 MB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 9238 bytes 632097 (632.0 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
inet 127.0.0.1 netmask 255.0.0.0
inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 1420 bytes 91876 (91.8 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 1420 bytes 91876 (91.8 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

keertan@LAPTOP-1LRPIC3M:~/Documents$
```

```
keertan@LAPTOP-1LRPIC3M:~/Documents$ sudo apt install traceroute
[sudo] password for keertan:
Sorry, try again.
[sudo] password for keertan:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Package traceroute is not available, but is referred to by another package.
This may mean that the package is missing, has been obsoleted, or
is only available from another source

E: Package 'traceroute' has no installation candidate
keertan@LAPTOP-1LRPIC3M:~/Documents$ traceroute google.com
traceroute: command not found
keertan@LAPTOP-1LRPIC3M:~/Documents$ nslookup google.com
Command 'nslookup' not found, but can be installed with:
sudo apt install bind9-dnsutils
keertan@LAPTOP-1LRPIC3M:~/Documents$ sudo apt install bind9-dnsutils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
bind9-host bind9-libs liblmbdb0 libmaxminddb0 libuv1t64
Suggested packages:
mmdns-bin
The following NEW packages will be installed:
bind9-dnsutils bind9-host bind9-libs liblmbdb0 libmaxminddb0 libuv1t64
0 upgraded, 6 newly installed, 0 to remove and 3 not upgraded.
Need to get 1625 kB of archives.
After this operation, 4641 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
0% [Working]
```



```

keerthan@LAPTOP-1LRPIC3M:~/Documents$ renice -n 10 6607
renice: failed to get priority for 6607 (process ID): No such process
keerthan@LAPTOP-1LRPIC3M:~/Documents$ pstree
systemd--2*[agetty]
        |--cron
        |--dbus-daemon
        |--init-systemd(Ub)
        |   |--SessionLeader--Relay(510)--bash--less
        |   |                               |
        |   |                               +--pstree
        |   |--init--{init}
        |   |--login--bash
        |   |--{init-systemd(Ub)}
        |--rsyslogd--3*[{rsyslogd}]
        |--systemd--(sd-pam)
        |--systemd-journal
        |--systemd-logind
        |--systemd-resolve
        |--systemd-timesyn--{systemd-timesyn}
        |--systemd-udev
        |--unattended-upgr--{unattended-upgr}
        |--wsl-pro-service--7*[{wsl-pro-service}]
keerthan@LAPTOP-1LRPIC3M:~/Documents$ pgrep firefox
keerthan@LAPTOP-1LRPIC3M:~/Documents$ jobs
[1]+  Stopped                  less file1.txt (wd: ~/Documents/folders)
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ping
ping: usage error: Destination address required
keerthan@LAPTOP-1LRPIC3M:~/Documents$ ping google.com
ping: google.com: Temporary failure in name resolution

```

```

diff: file3.txt: No such file or directory
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ diff file1.txt file2.txt
1c1
< hello operating system
---
> hello world
\ No newline at end of file
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ ps
  PID TTY          TIME CMD
   510 pts/0    00:00:00 bash
   642 pts/0    00:00:00 less
   657 pts/0    00:00:00 ps
keerthan@LAPTOP-1LRPIC3M:~/Documents/folders$ top
top - 16:05:03 up 32 min,  1 user,  load average: 0.00, 0.04, 0.05
Tasks: 24 total,  1 running, 22 sleeping,  1 stopped,  0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem : 7642.3 total, 6893.0 free, 722.6 used, 295.2 buff/cache
MiB Swap: 2048.0 total, 2048.0 free,  0.0 used. 6919.8 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM    TIME+  COMMAND
    1 root        20   0  21544  12876  9620  S   0.0   0.2   0:00.95  systemd
    2 root        20   0   2616   1440  1320  S   0.0   0.0   0:00.01  init-systemd(Ub
    6 root        20   0   2652    132    132  S   0.0   0.0   1:08.93  init
   54 root        19  -1  66816  17408 16292  S   0.0   0.2   0:00.44  systemd-journal
   81 root        20   0  23972   5936  4788  S   0.0   0.1   0:00.34  systemd-udev
  145 systemd+    20   0  21452  11788  9588  S   0.0   0.2   0:00.18  systemd-resolve
  146 systemd+    20   0  91020   6508  5656  S   0.0   0.1   0:00.33  systemd-timesyn
  152 root        20   0   4236   2664  2440  S   0.0   0.0   0:00.01  cron
  153 message+    20   0   9536   5160  4524  S   0.0   0.1   0:00.08  dbus-daemon
  175 root        20   0  17976   8256  7228  S   0.0   0.1   0:00.18  systemd-logind
  182 root        20   0 1756096  18076  9460  S   0.0   0.2   0:00.24  wsl-pro-service
  202 root        20   0   3160   1200  1112  S   0.0   0.0   0:00.01  agetty
  224 root        20   0   3116   1192  1108  S   0.0   0.0   0:00.01  agetty
  235 syslog      20   0 222508    7288  4456  S   0.0   0.1   0:00.12  rsyslogd
  256 root        20   0 106992  22324 12988  S   0.0   0.3   0:00.17  unattended-upgr
  343 root        20   0   6688   4656  3876  S   0.0   0.1   0:00.01  login
  431 keerthan    20   0  20252  11304  9232  S   0.0   0.1   0:00.14  systemd
  432 keerthan    20   0  21144   1728    4  S   0.0   0.0   0:00.00  (sd-pam)

```

```
Command Prompt x keertan@LAPTOP-1LRPIC3M x + v
top - 16:14:02 up 41 min, 1 user, load average: 0.00, 0.02, 0.02
Tasks: 24 total, 1 running, 22 sleeping, 1 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni,100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 7642.3 total, 6880.3 free, 731.5 used, 299.0 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 6918.8 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM    TIME+  COMMAND
    1 root        20   0   21544   12876 9620  S   0.0   0.2   0:00.98 systemd
    2 root        20   0    2616    1440 1320  S   0.0   0.0   0:00.01 init-systemd(Ub
    6 root        20   0    2652    132   132  S   0.0   0.0   1:08.93 init
   54 root       19  -1   66816  17420 16300  S   0.0   0.2   0:00.47 systemd-journal
   81 root        20   0   23972   5936  4788  S   0.0   0.1   0:00.36 systemd-udev
  145 systemd+   20   0   21452  11788 9588  S   0.0   0.2   0:00.18 systemd-resolve
  146 systemd+   20   0   91020   6508 5656  S   0.0   0.1   0:00.39 systemd-timesyn
  152 root        20   0    4236   2664  2440  S   0.0   0.0   0:00.02 cron
  153 message+   20   0   9536   5160  4524  S   0.0   0.1   0:00.10 dbus-daemon
  175 root        20   0   17976   8256  7228  S   0.0   0.1   0:00.18 systemd-logind
  182 root        20   0  1756096  18076 9460  S   0.0   0.2   0:00.26 wsl-pro-service
  202 root        20   0    3160   1200  1112  S   0.0   0.0   0:00.01 agetty
  224 root        20   0    3116   1192  1108  S   0.0   0.0   0:00.01 agetty
  235 syslog    20   0  222508   7288  4456  S   0.0   0.1   0:00.12 rsyslogd
  256 root        20   0  106992  22324 12988  S   0.0   0.3   0:00.17 unattended-upgr
  343 root        20   0    6688   4656  3876  S   0.0   0.1   0:00.01 login
  431 keertan     20   0   20252  11304  9232  S   0.0   0.1   0:00.14 systemd
  432 keertan     20   0   21144   1728    4  S   0.0   0.0   0:00.00 (sd-pam)
  445 keertan     20   0    6072   4776  3272  S   0.0   0.1   0:00.03 bash
  508 root        20   0    2620    124    0  S   0.0   0.0   0:00.00 SessionLeader
  509 root        20   0    2620    128    0  S   0.0   0.0   0:00.34 Relay(510)
  510 keertan     20   0    6072   5388  3668  S   0.0   0.1   0:00.34 bash
  642 keertan     20   0    3512   2404  2100  T   0.0   0.0   0:00.02 less
  693 keertan     20   0    9288   5272  3120  R   0.0   0.1   0:00.04 top

keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ awk '{print $1}' file1.txt
hello
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ nano file2.txt
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ nano file2.txt
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ vin file2.txt
Command 'vin' not found, did you mean:
  command 'vim' from deb vim (2:9.1.0016-1ubuntu7.3)
  command 'vim' from deb vim-gtk3 (2:9.1.0016-1ubuntu7.3)
  command 'vim' from deb vim-motif (2:9.1.0016-1ubuntu7.3)
  command 'vim' from deb vim-nox (2:9.1.0016-1ubuntu7.3)
  command 'vi' from deb vim (2:9.1.0016-1ubuntu7.3)
  command 'vi' from deb vim-tiny (2:9.1.0016-1ubuntu7.3)
  command 'vi' from deb vim-gtk3 (2:9.1.0016-1ubuntu7.3)
  command 'vi' from deb vim-motif (2:9.1.0016-1ubuntu7.3)
  command 'vi' from deb vim-nox (2:9.1.0016-1ubuntu7.3)
Try: sudo apt install <deb name>
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ du -sh folder2
du: cannot access 'folder2': No such file or directory
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ du -sh folder1
du: cannot access 'folder1': No such file or directory
keertan@LAPTOP-1LRPIC3M:~/Documents/folders$ cd ..
keertan@LAPTOP-1LRPIC3M:~/Documents$ du -sh folder1
du: cannot access 'folder1': No such file or directory
keertan@LAPTOP-1LRPIC3M:~/Documents$ du -sh folders
12K    folders
```



```

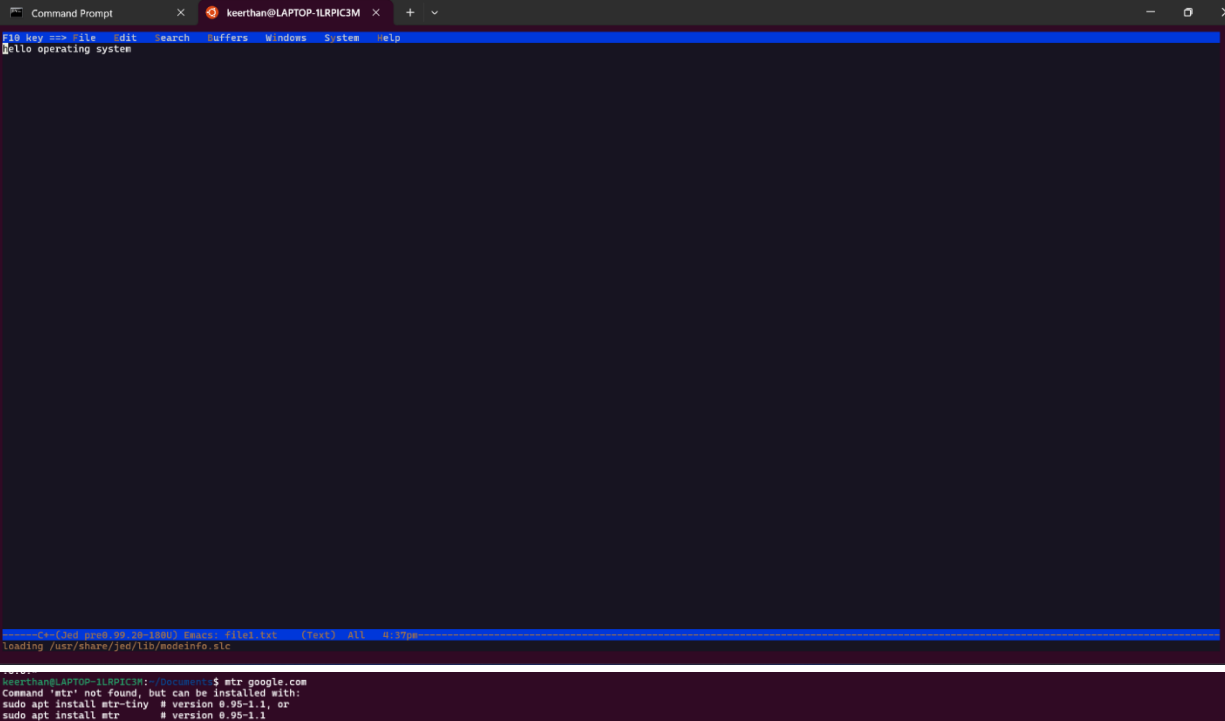
weerthan@LAPTOP-ILRPICJR: /Documents$ route -n
Kernel IP routing table
Destination      Gateway         Genmask         Flags Metric Ref    Use Iface
0.0.0.0          172.19.80.1    0.0.0.0        UG  0     0    0 eth0
172.19.80.0      0.0.0.0        255.255.248.0  U   0     0    0 eth0

weerthan@LAPTOP-ILRPICJR: /Documents$ ss -tln
LAPTOP-ILRPICJR.sshd[sshd] at 00:15:5d:38:53:32 [eth0] on eth0
weerthan@LAPTOP-ILRPICJR: /Documents$ ss -tuln

Netid      State      Process              Recv-Q      Send-Q      Local Address:Port      Peer Add
udp        UNCONN                                0            0                127.0.0.54:53           0.0
*.0.0.*    UNCONN                                0            0                127.0.0.53%lo:53       0.0
*.0.0.*    UNCONN                                0            0               10.255.255.254:53       0.0
*.0.0.*    UNCONN                                0            0               127.0.0.1:323         0.0
*.0.0.*    UNCONN                                0            0                 [:*:]:323             0.0
tcp        LISTEN                                0            1000                10.255.255.254:53       0.0
*.0.0.*    LISTEN                                0           4096                127.0.0.54:53          0.0
*.0.0.*    LISTEN                                0           4096                127.0.0.53%lo:53       0.0

weerthan@LAPTOP-ILRPICJR: /Documents$ mtr google.com
Command 'mtr' not found, but can be installed with:
sudo apt install mtr-tiny # version 0.95-1.1, or
sudo apt install mtr      # version 0.95-1.1
weerthan@LAPTOP-ILRPICJR: /Documents$ cat file.txt;ls -ld file.txt
file.txt: No such file or directory

```



```
Command Prompt
keerthan@LAPTOP-1LRP1C3M
f10 key ==> file edit search buffers windows system help
hello operating system

loading /usr/share/jea/lib/nodeinfo.slc

Command 'mtr' not found, but can be installed with:
sudo apt install mtr-tiny # version 0.95-1.1, or
sudo apt install mtr # version 0.95-1.1
```

```

Command Prompt
keerthan@LAPTOP-1LRPIC3M: $ sudo useradd abc
[sudo] password for keerthan:
keerthan@LAPTOP-1LRPIC3M: $ sudo useradd abc
useradd: user 'abc' already exists
keerthan@LAPTOP-1LRPIC3M: $ sudo useradd def
keerthan@LAPTOP-1LRPIC3M: $ sudo passwd def
New password:
Retype new password:
passwd: password updated successfully
keerthan@LAPTOP-1LRPIC3M: $ sudo userdel def
keerthan@LAPTOP-1LRPIC3M: $ sudo apt update
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
10 packages can be upgraded. Run 'apt list --upgradable' to see them.
keerthan@LAPTOP-1LRPIC3M: $ whoami
keerthan
keerthan@LAPTOP-1LRPIC3M: $ man ls
keerthan@LAPTOP-1LRPIC3M: $ man ls
keerthan@LAPTOP-1LRPIC3M: $ cd -
-bash: cd: OLDPWD not set
keerthan@LAPTOP-1LRPIC3M: $ cd .
keerthan@LAPTOP-1LRPIC3M: $ cd Downloads/folders
-bash: cd: Downloads/folders: No such file or directory
keerthan@LAPTOP-1LRPIC3M: $ cd Download/folders
-bash: cd: Download/folders: No such file or directory
keerthan@LAPTOP-1LRPIC3M: $ cd Download
-bash: cd: Download: No such file or directory
keerthan@LAPTOP-1LRPIC3M: $ cd Documents/folders
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ ls
file1.txt file2.txt folders link1
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ touch .file3.txt
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ ls -la ~/
-bash_history  .bash_logout  .bashrc  cache  .config  .landscape  .lessshst  .local  .motd_shown  .profile  .sudo_as_admin_successful  Documents
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ la -la
..  .file1.txt  ..  .file3.txt  file1.txt  file2.txt  folders  link1
Processing triggers for systemd (252.42-0ubuntu2) ...
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ jed file1.txt
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ chmod -R 755 folders
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ sudo groupadd group1
[sudo] password for keerthan:
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ sudo chown keerthan:group1 file1.txt
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ sudo chown -R keerthan:group1 folders
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$ sudo groupdel group1
keerthan@LAPTOP-1LRPIC3M: ~/Documents/folders$

```

```
Command Prompt
keerthan@LAPTOP-1LRPIC3M: /Documents/folder$ ed file.txt
file.txt: No such file or directory
keerthan@LAPTOP-1LRPIC3M: /Documents/folder$ ed file1.txt
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keerthan@LAPTOP-1LRPIC3M: /Documents/folder$ jed file1.txt
Command 'jed' not found, but can be installed with:
sudo apt install jed
keerthan@LAPTOP-1LRPIC3M: /Documents/folder$ sudo apt install jed
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  jed-common libonig5 libslang2-modules slsh
Suggested packages:
  gvim
The following NEW packages will be installed:
  jed jed-common libonig5 libslang2-modules slsh
0 upgraded, 5 newly installed, 0 to remove and 10 not upgraded.
Need to get 953 kB of archives.
After this operation, 4365 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 libonig5 amd64 6.9.9-1build1 [172 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/universe amd64 libslang2-modules amd64 2.3.3-3build2 [89.8 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble/universe amd64 slsh amd64 2.3.3-3build2 [136 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble/universe amd64 jed-common all 1:0.99.20-pre.180+dfsg-2 [389 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble/universe amd64 jed amd64 1:0.99.20-pre.180+dfsg-2 [167 kB]
Fetched 953 kB in 3s (295 kB/s)
Selecting previously unselected package libonig5:amd64.
(Reading database ... 40923 files and directories currently installed.)
Preparing to unpack .../libonig5_6.9.9-1build1_amd64.deb ...
Unpacking libonig5:amd64 (6.9.9-1build1) ...
Selecting previously unselected package libslang2-modules:amd64.
Preparing to unpack .../libslang2-modules_2.3.3-3build2_amd64.deb ...
Unpacking libslang2-modules:amd64 (2.3.3-3build2) ...
Selecting previously unselected package slsh.
Preparing to unpack .../slsh_2.3.3-3build2_amd64.deb ...
Unpacking slsh (2.3.3-3build2) ...
Selecting previously unselected package jed-common.
Preparing to unpack .../jed-common_1k3a0.99.20-pre.180+dfsg-2_all.deb ...
Unpacking jed-common (1:0.99.20-pre.180+dfsg-2) ...
Selecting previously unselected package jed.
Preparing to unpack .../jed_1k3a0.99.20-pre.180+dfsg-2_amd64.deb ...
Unpacking jed (1:0.99.20-pre.180+dfsg-2) ...
Setting up libonig5:amd64 (6.9.9-1build1) ...
Setting up libslang2-modules:amd64 (2.3.3-3build2) ...
Setting up slsh (2.3.3-3build2) ...
Setting up jed-common (1:0.99.20-pre.180+dfsg-2) ...
Setting up jed (1:0.99.20-pre.180+dfsg-2) ...
update-alternatives: using /usr/bin/jed to provide /usr/bin/editor (editor) in auto mode
update-alternatives: using /usr/bin/jed to provide /usr/bin/jed-script (jed-script) in auto mode
Updating precompiled files... done
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for install-info (7.1-3build2) ...
keerthan@LAPTOP-1LRPIC3M: /Documents/folder$
```

```
Command Prompt
keerthan@LAPTOP-1LRPIC3M: X kee... kee...
User Commands LS(1)
NAME
ls - list directory contents
SYNOPSIS
ls [OPTION]... [FILE]...
DESCRIPTION
List information about the FILES (the current directory by default). Sort entries alphabetically if none of -ctuvSUX nor --sort is specified.
Mandatory arguments to long options are mandatory for short options too.
-a, --all
do not ignore entries starting with .
-A, --almost-all
do not list implied . and ..
--author
with -l, print the author of each file
-b, --escape
print C-style escapes for nongraphic characters
--block-size=SIZE
with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below
-B, --ignore-backups
do not list implied entries ending with ~
-c
with -lt: sort by, and show, ctime (time of last change of file status information); with -l: show ctime and sort by name; otherwise: sort by ctime, newest first
-C
list entries by columns
--color[=WHEN]
color the output WHEN; more info below
-d, --directory
Manual page ls(1) line 1 (press h for help or q to quit)
```