

## Assign 1 : Basic Linux Commands

```
MAN(1) Manual pager utils MAN(1)
NAME
man - an interface to the system reference manuals

SYNOPSIS
man [man options] [[section] page ...] ...
man -k [apropos options] regexp ...
man -K [man options] [section] term ...
man -f [whatis options] page ...
man -l [man options] file ...
man -w|-W [man options] page ...

DESCRIPTION
man is the system's manual pager. Each page argument given to man is normally the name of a program, utility or function. The manual page associated with each of these arguments is then found and displayed. A section, if provided, will direct man to look only in that section of the manual. The default action is to search in all of the available sections following a pre-defined order (see DEFAULTS), and to show only the first page found, even if page exists in several sections.

The table below shows the section numbers of the manual followed by the types of pages they contain.

1 Executable programs or shell commands
2 System calls (functions provided by the kernel)
3 Library calls (functions within program libraries)
4 Special files (usually found in /dev)
5 File formats and conventions, e.g. /etc/passwd
6 Games
7 Miscellaneous (including macro packages and conventions), e.g. man(7), groff(7), man-pages(7)
8 System administration commands (usually only for root)
9 Kernel routines [Non standard]

A manual page consists of several sections.

Conventional section names include NAME, SYNOPSIS, CONFIGURATION, DESCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUE, ERRORS, ENVIRONMENT, FILES, VERSIONS, CONFORMING TO, NOTES, BUGS, EXAMPLE, AUTHORS, and SEE ALSO.

The following conventions apply to the SYNOPSIS section and can be used as a guide in other sections.

bold text           type exactly as shown.
italic text        replace with appropriate argument.
[-abc]              any or all arguments within [ ] are optional.
-a|-b              options delimited by | cannot be used together.
argument ...       argument is repeatable.
[expression] ...   entire expression within [ ] is repeatable.

Exact rendering may vary depending on the output device. For instance,
Manual page man(1) line 1 (press h for help or q to quit)
```

```
akash@apk-lp: ~
akash@apk-lp:~$ man
What manual page do you want?
For example, try 'man man'.
akash@apk-lp:~$ man man
akash@apk-lp:~$ uname
Linux
akash@apk-lp:~$
```

```
akash@apk-lp: ~
akash@apk-lp:~$ pwd
/home/akash
akash@apk-lp:~$
```

```
akash@apk-lp: ~  
akash@apk-lp:~$ hostname  
apk-lp  
akash@apk-lp:~$
```

```
akash@apk-lp:~$ date  
Monday 25 December 2023 03:38:15 PM IST  
akash@apk-lp:~$
```

```
akash@apk-lp:~$ cal -y  
  
2023  
January February March  
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa  
1 2 3 4 5 6 7 1 2 3 4 1 2 3 4  
8 9 10 11 12 13 14 5 6 7 8 9 10 11 5 6 7 8 9 10 11  
15 16 17 18 19 20 21 12 13 14 15 16 17 18 12 13 14 15 16 17 18  
22 23 24 25 26 27 28 19 20 21 22 23 24 25 19 20 21 22 23 24 25  
29 30 31 26 27 28 26 27 28 29 30 31  
  
April May June  
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa  
1 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3  
2 3 4 5 6 7 8 7 8 9 10 11 12 13 4 5 6 7 8 9 10  
9 10 11 12 13 14 15 14 15 16 17 18 19 20 11 12 13 14 15 16 17  
16 17 18 19 20 21 22 21 22 23 24 25 26 27 18 19 20 21 22 23 24  
23 24 25 26 27 28 29 28 29 30 31 25 26 27 28 29 30  
30  
  
July August September  
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa  
1 1 2 3 4 5 1 2  
2 3 4 5 6 7 8 6 7 8 9 10 11 12 3 4 5 6 7 8 9  
9 10 11 12 13 14 15 13 14 15 16 17 18 19 10 11 12 13 14 15 16  
16 17 18 19 20 21 22 20 21 22 23 24 25 26 17 18 19 20 21 22 23  
23 24 25 26 27 28 29 27 28 29 30 31 24 25 26 27 28 29 30  
30 31  
  
October November December  
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa  
1 2 3 4 5 6 7 1 2 3 4 1 2  
8 9 10 11 12 13 14 5 6 7 8 9 10 11 3 4 5 6 7 8 9  
15 16 17 18 19 20 21 12 13 14 15 16 17 18 10 11 12 13 14 15 16  
22 23 24 25 26 27 28 19 20 21 22 23 24 25 17 18 19 20 21 22 23  
29 30 31 26 27 28 29 30 24 25 26 27 28 29 30  
31
```

```
akash@apk-lp:~$ ls  
aaaaaaaa.mwb Documents Practice  
aaaa.xml Downloads Project  
abc.java Hackathon Public  
adv_java80442 hs_err_pid27963.log review.java  
adv_java80442.zip hs_err_pid4106.log snap  
Android hs_err_pid6327.log Templates  
AndroidStudioProjects lab tomcat  
Assignment Music Videos  
Desktop new  
DMC Pictures  
akash@apk-lp:~$
```

```
akash@apk-lp: ~  
akash@apk-lp:~$ dir  
aaaaaaaa.mwb      Documents      Practice  
aaaa.xml          Downloads     Project  
abc.java          Hackathon     Public  
adv_java80442     hs_err_pid27963.log review.java  
adv_java80442.zip hs_err_pid4106.log snap  
Android           hs_err_pid6327.log Templates  
AndroidStudioProjects lab            tomcat  
Assignment        Music          Videos  
Desktop           new  
DMC               Pictures
```

```
akash@apk-lp: ~/new  
aaaaaaaa.mwb      Documents      Practice  
aaaa.xml          Downloads     Project  
abc.java          Hackathon     Public  
adv_java80442     hs_err_pid27963.log review.java  
adv_java80442.zip hs_err_pid4106.log snap  
Android           hs_err_pid6327.log Templates  
AndroidStudioProjects lab            tomcat  
Assignment        Music          Videos  
Desktop           new  
DMC               Pictures  
akash@apk-lp:~$ cd new  
akash@apk-lp:~/new$
```

```
akash@apk-lp: ~  
akash@apk-lp:~$ cat > demo.txt  
hello...  
akash@apk-lp:~$ cat demo.txt  
hello...  
akash@apk-lp:~$
```

```
akash@apk-lp: ~  
akash@apk-lp:~$ cat > demo.txt  
hello...  
akash@apk-lp:~$ cat demo.txt  
hello...  
akash@apk-lp:~$ cp demo.txt copy.txt  
akash@apk-lp:~$ cat copy.txt  
hello...  
akash@apk-lp:~$
```

```
akash@apk-lp: ~/new  
akash@apk-lp:~$ ls  
aaaaaaaa.mwb      copy.txt          hs_err_pid4106.log  Public  
aaaa.xml          demo.txt          hs_err_pid6327.log  review.java  
abc.java          Desktop           lab                 snap  
adv_java80442     DMC              Music              Templates  
adv_java80442.zip Documents         new                tomcat  
Android           Downloads        Pictures            Videos  
AndroidStudioProjects Hackathon        Practice  
Assignment        hs_err_pid27963.log Project  
akash@apk-lp:~$ cp -r new copynew  
akash@apk-lp:~$ cd new  
akash@apk-lp:~/new$ cat demo.txt  
hello...  
akash@apk-lp:~/new$
```

```
akash@apk-lp: ~/new  
akash@apk-lp:~$ ls  
aaaaaaaa.mwb      copy.txt          hs_err_pid4106.log  Public  
aaaa.xml          demo.txt          hs_err_pid6327.log  review.java  
abc.java          Desktop           lab                 snap  
adv_java80442     DMC              Music              Templates  
adv_java80442.zip Documents         new                tomcat  
Android           Downloads        Pictures            Videos  
AndroidStudioProjects Hackathon        Practice  
Assignment        hs_err_pid27963.log Project  
akash@apk-lp:~$ cp -r new copynew  
akash@apk-lp:~$ cd new  
akash@apk-lp:~/new$ cat demo.txt  
hello...  
akash@apk-lp:~/new$ ls  
demo.txt  
akash@apk-lp:~/new$ mkdir ancd  
akash@apk-lp:~/new$ ls  
ancd demo.txt  
akash@apk-lp:~/new$ mv demo.txt abcd  
akash@apk-lp:~/new$ cd abcd  
bash: cd: abcd: Not a directory  
akash@apk-lp:~/new$ dc ancd  
dc: Will not attempt to process directory ancd  
akash@apk-lp:~/new$ ls  
abcd ancd  
akash@apk-lp:~/new$ cat abcd.txt  
cat: abcd.txt: No such file or directory  
akash@apk-lp:~/new$ cat abcd  
hello...  
akash@apk-lp:~/new$
```

```
akash@apk-lp: ~  
akash@apk-lp:~$ cd new  
akash@apk-lp:~/new$ cat demo.txt  
hello...  
akash@apk-lp:~/new$ ls  
demo.txt  
akash@apk-lp:~/new$ mkdir ancd  
akash@apk-lp:~/new$ ls  
ancd demo.txt  
akash@apk-lp:~/new$ mv demo.txt abcd  
akash@apk-lp:~/new$ cd abcd  
bash: cd: abcd: Not a directory  
akash@apk-lp:~/new$ dc ancd  
dc: Will not attempt to process directory ancd  
akash@apk-lp:~/new$ ls  
abcd ancd  
akash@apk-lp:~/new$ cat abcd.txt  
cat: abcd.txt: No such file or directory  
akash@apk-lp:~/new$ cat abcd  
hello...  
akash@apk-lp:~/new$ cd ..  
akash@apk-lp:~$ rm -r new  
akash@apk-lp:~$ ls  
aaaaaaaa.mwb      copynew  hs_err_pid27963.log  Public  
aaaa.xml          copy.txt hs_err_pid4106.log  review.java  
abc.java          demo.txt hs_err_pid6327.log  snap  
adv_java80442     Desktop lab             Templates  
adv_java80442.zip DMC      Music             tomcat  
Android           Documents Pictures          Videos  
AndroidStudioProjects Downloads Practice  
Assignment        Hackathon Project  
akash@apk-lp:~$
```

```
akash@apk-lp: ~/copynew  
aaaa.xml          copy.txt  hs_err_pid4106.log  review.java  
abc.java          demo.txt  hs_err_pid6327.log  snap  
adv_java80442     Desktop  lab             Templates  
adv_java80442.zip DMC      Music             tomcat  
Android           Documents Pictures          Videos  
AndroidStudioProjects Downloads Practice  
Assignment        Hackathon Project  
akash@apk-lp:~$ cd copynew  
akash@apk-lp:~/copynew$ touch f1.txt f2.txt f3.txt  
akash@apk-lp:~/copynew$ ls  
demo.txt f1.txt f2.txt f3.txt  
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew  
Android           Documents Pictures          Videos  
AndroidStudioProjects Downloads Practice  
Assignment        Hackathon Project  
akash@apk-lp:~$ cd copynew  
akash@apk-lp:~/copynew$ touch f1.txt f2.txt f3.txt  
akash@apk-lp:~/copynew$ ls  
demo.txt f1.txt f2.txt f3.txt  
akash@apk-lp:~/copynew$ tac demo.txt  
apkhello...  
akash@apk-lp:~/copynew$ rev demo.txt  
...olleh  
kpaakash@apk-lp:~/copynew$
```

```
Assignment Hackathon Project
akash@apk-lp: ~/copynew
akash@apk-lp:~/copynew$ cd copynew
akash@apk-lp:~/copynew$ touch f1.txt f2.txt f3.txt
akash@apk-lp:~/copynew$ ls
demo.txt f1.txt f2.txt f3.txt
akash@apk-lp:~/copynew$ tac demo.txt
apkhello...
akash@apk-lp:~/copynew$ rev demo.txt
...olleh
kpaakash@apk-lp:~/copynew$ wc demo.txt
 1  2 12 demo.txt
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
akash@apk-lp:~/copynew$ cat >> f1.txt
2
4
7
33
12
53
65
21
43
23
akash@apk-lp:~/copynew$ sort f1.txt
1
12
2
2
21
23
3
33
4
4
43
5
53
6
65
7
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
akash@apk-lp:~/copynew$ cat > f3.txt
aaa
aaa
aaa
bb
bb
ccc
cc
cc
cc
akash@apk-lp:~/copynew$ uniq -c f3.txt
 3 aaa
 2 bb
 1 ccc
 3 cc
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
aaa
akash@apk-lp:~/copynew$ tail -n 2 f3.txt
CC
CC
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
^C
akash@apk-lp:~/copynew$ factor
81
81: 3 3 3 3
72
72: 2 2 2 3 3
^C
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
alias ls='ls --color=auto'
akash@apk-lp:~/copynew$ alias -p NEW="mkdir new1"
alias alert='notify-send --urgency=low -i "${[ $? = 0 ]} && echo terminal || echo error" "${history|tail -n1|sed -e '\''s/^\s*[0-9]\+\s*//;s/[:;&]\s*alert//'\`}'"
alias egrep='egrep --color=auto'
alias fgrep='fgrep --color=auto'
alias grep='grep --color=auto'
alias l='ls -CF'
alias la='ls -A'
alias ll='ls -aF'
alias ls='ls --color=auto'
alias new1='mkdir new1'
akash@apk-lp:~/copynew$ new
Command 'new' not found, but can be installed with:
sudo apt install mmh # version 0.4-4, or
sudo apt install nmh # version 1.7.1-11
akash@apk-lp:~/copynew$ NEW
akash@apk-lp:~/copynew$ ls
demo.txt f1.txt f2.txt f3 f3.txt new1
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
akash@apk-lp:~/copynew$ NEW
NEW: command not found
akash@apk-lp:~/copynew$
```

```
akash@apk-lp: ~/copynew
akash@apk-lp:~/copynew$ echo java
java
akash@apk-lp:~/copynew$ ps
  PID TTY          TIME CMD
 8067 pts/0    00:00:00 bash
10281 pts/0    00:00:00 ps
akash@apk-lp:~/copynew$ env
```

```
akash@apk-lp:~/copynew$ ps
  PID TTY          TIME CMD
 8067 pts/0    00:00:00 bash
10281 pts/0    00:00:00 ps
akash@apk-lp:~/copynew$ env
SHELL=/bin/bash
SESSION_MANAGER=local/apk-lp:0/tnp/.ICE-unix/2026,unix/apk-lp:tnp/.ICE-unix/2026
QT_ACCESSIBILITY=1
COLORTERM=truecolor
XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg
SSH_AGENT_LAUNCHER=gnome-keyring
XDG_MENU_PREFIX=gnome-
GNOME_DESKTOP_SESSION_ID=this:ls-deprecated
GTK_IM_MODULE=ibus
LANGUAGE=en_IN:en
GNOME_SHELL_SESSION_MODE=ubuntu
SSH_AUTH_SOCK=/run/user/1000/ssh
XMODIFIERS=@Im=ibus
DESKTOP_SESSION=ubuntu
GTK_MODULES=gall:atk-bridge
PWD=/home/akash/copynew
LOGNAME=akash
XDG_SESSION_DESKTOP=ubuntu
XDG_SESSION_TYPE=x11
GPG_AGENT_INFO=/run/user/1000/gnupg/S.gpg-agent:0:1
SYSTEMD_EXEC_PID=2045
XAUTHORITY=/run/user/1000/gdm/authority
WINDOWPATH=2
HOME=/home/akash
USERNAME=akash
LANG=en_IN
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pl=40;33:so=01;35:do=01;35:bd=40;33:cd=40;33:or=40;31:01:ml=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;
42:st=37;44:ex=01;32:*tar=01;31*:tgz=01;31*:arc=01;31*:arj=01;31*:taz=01;31*:lha=01;31*:lzh=01;31*:lza=01;31*:tlz=01;31*:txz=01;
31*:tzo=01;31*:47z=01;31*:zip=01;31*:z=01;31*:dz=01;31*:gz=01;31*:lrz=01;31*:lzo=01;31*:xz=01;31*:zst=01;31*:tzt=01;31*:bzz=0
1;31*:bzs=01;31*:tbz=01;31*:tbz2=01;31*:t2=01;31*:deb=01;31*:rpm=01;31*:jar=01;31*:war=01;31*:ear=01;31*:sar=01;31*:rar=01;31*:alz=01;31*:
ace=01;31*:zoo=01;31*:cpt=01;31*:7z=01;31*:rz=01;31*:cab=01;31*:wlm=01;31*:swm=01;31*:dwm=01;31*:esd=01;31*:jpg=01;35*:jpeg=01;35*:njpg=0
1;35*:njpeg=01;35*:gif=01;35*:bmp=01;35*:pbm=01;35*:pgm=01;35*:ppm=01;35*:tga=01;35*:xbm=01;35*:xpm=01;35*:tif=01;35*:tiff=01;35*:png=01;3
5*:svg=01;35*:svgz=01;35*:mng=01;35*:pca=01;35*:mov=01;35*:mpeg=01;35*:m2v=01;35*:mkv=01;35*:webm=01;35*:webp=01;35*:ogm=01;35:
*mpa=01;35*:m4v=01;35*:mp4v=01;35*:vob=01;35*:qt=01;35*:nuv=01;35*:smv=01;35*:asf=01;35*:rm=01;35*:rmvb=01;35*:flc=01;35*:avi=01;35*:fl
01;35*:flv=01;35*:gl=01;35*:dl=01;35*:xcf=01;35*:xwd=01;35*:yuv=01;35*:cgm=01;35*:enf=01;35*:ogv=01;35*:ogk=01;35*:aac=00;36*:au=00;36*:f
lac=00;36*:m4a=00;36*:mid=00;36*:midi=00;36*:nka=00;36*:np3=00;36*:mpc=00;36*:ogg=00;36*:ra=00;36*:wav=00;36*:oga=00;36*:opus=00;36*:spx=0
0;36*:asx=00;36*
XDG_CURRENT_DESKTOP=ubuntu:GNOME
VTE_VERSION=6800
GNOME_TERMINAL_SCREEN=/org/gnome/Terminal/screen/2cbb551_ad38_4879_8780_f6284ce78c99
LESSCLOSE=/usr/bin/lesspipe %s %s
XDG_SESSION_CLASS=user
```