

Assignment No 1

1)MAN:

```
karan@D2-KARAN-92917: ~  
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, man will usually  
not be able to render italics when running in a terminal, and will typically use underlined  
or coloured text instead.  
Manual page man(1) line 1 (press h for help or q to quit)
```

2)uname:

```
karan@D2-KARAN-92917:~$ uname  
Linux  
karan@D2-KARAN-92917:~$ uname -i  
x86_64  
karan@D2-KARAN-92917:~$ uname -a  
Linux D2-KARAN-92917 6.8.0-40-generic #40~22.04.3-Ubuntu SMP PREEMPT_DYNAMIC Tue Jul 30 17:30:19 UTC  
2 x86_64 x86_64 x86_64 GNU/Linux  
karan@D2-KARAN-92917:~$
```

3)pwd:

```
karan@D2-KARAN-92917:~$ pwd  
/home/karan
```

4)hostname:

```
karan@D2-KARAN-92917:~$ hostname -A
D2-KARAN-92917 D2-KARAN-92917 D2-KARAN-92917
karan@D2-KARAN-92917:~$ hostname -i
2409:40c2:1296:f0f4:130c:756f:800e:8d53 2409:40c2:1296:f0f4:8171:2f5c:bc9a:8c9a 10.212.102.109 fe80::7dd4:5ddc:bea5:bb85
karan@D2-KARAN-92917:~$
```

5)date:

```
karan@D2-KARAN-92917:~$ date
Saturday 25 October 2025 03:16:01 PM IST
```

6)cal:

```
karan@D2-KARAN-92917:~$ cal
October 2025
Su Mo Tu We Th Fr Sa
          1  2  3  4
 5  6  7  8  9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31
```

7)ls,dir

```
karan@D2-KARAN-92917:~$ ls
authenticator.txt Desktop Downloads Pictures snap Videos
CDAC Documents Music Public Templates
karan@D2-KARAN-92917:~$ dir
authenticator.txt Desktop Downloads Pictures snap Videos
CDAC Documents Music Public Templates
karan@D2-KARAN-92917:~$
```

8)cat:

9)cat>>

```
karan@D2-KARAN-92917:~$ cat demo.txt
karan@D2-KARAN-92917:~$ cat >> demo.txt
karan ramchnadra patil
hi
to
everyone
karan@D2-KARAN-92917:~$ cat demo.txt
karan ramchnadra patil
hi
to
everyone
karan@D2-KARAN-92917:~$
```

10)mv:

```
karan@D2-KARAN-92917:~$ ls
authenticator.txt demo.txt Documents Music Public Templates
CDAC Desktop Downloads Pictures snap Videos
karan@D2-KARAN-92917:~$ mv demo.txt CDAC
karan@D2-KARAN-92917:~$ ls
authenticator.txt Desktop Downloads Pictures snap Videos
CDAC Documents Music Public Templates
karan@D2-KARAN-92917:~$ cd CDAC
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo.txt info.txt one OS
karan@D2-KARAN-92917:~/CDAC$
```

11)mv:

```
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo.txt info.txt one 05
karan@D2-KARAN-92917:~/CDAC$ mv demo.txt demo2.txt
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo2.txt info.txt one 05
karan@D2-KARAN-92917:~/CDAC$
```

12) tac,rev:

```
karan@D2-KARAN-92917:~/CDAC$ tac demo2.txt
everyone
to
hi
karan ramchnadra patil
karan@D2-KARAN-92917:~/CDAC$ rev demo2.txt
litap ardanhcmar narak
ih
ot
enoyreve
karan@D2-KARAN-92917:~/CDAC$
```

13)wc:

```
karan@D2-KARAN-92917:~/CDAC$ wc demo2.txt
 4  6 39 demo2.txt
karan@D2-KARAN-92917:~/CDAC$ wc -m demo2.txt
39 demo2.txt
karan@D2-KARAN-92917:~/CDAC$ wc -w demo2.txt
 6 demo2.txt
karan@D2-KARAN-92917:~/CDAC$ wc -l demo2.txt
 4 demo2.txt
karan@D2-KARAN-92917:~/CDAC$
```

14)mkdir:

```
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo2.txt info.txt one 05
karan@D2-KARAN-92917:~/CDAC$ mkdir demo
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo demo2.txt info.txt one 05
```

15)cd:

```
karan@D2-KARAN-92917:~/CDAC$ cd demo
karan@D2-KARAN-92917:~/CDAC/demo$ ls
karan@D2-KARAN-92917:~/CDAC/demo$ cd ..
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo demo2.txt info.txt one 05
```

16)rm:

```
karan@D2-KARAN-92917:~/CDAC$ rm info.txt
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo demo2.txt one 05
karan@D2-KARAN-92917:~/CDAC$ rm -r demo
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo2.txt one 05
karan@D2-KARAN-92917:~/CDAC$
```

17)rmdir:

```
karan@D2-KARAN-92917:~/CDAC$ rmdir demo
karan@D2-KARAN-92917:~/CDAC$ ls
Day-1 Day-2 demo2.txt one 05
karan@D2-KARAN-92917:~/CDAC$
```

18)touch:

```
karan@D2-KARAN-92917:~/CDAC$ touch 1.txt
karan@D2-KARAN-92917:~/CDAC$ ls
1.txt Day-1 Day-2 demo2.txt one OS
karan@D2-KARAN-92917:~/CDAC$ touch 2.txt 3.txt 4.txt
karan@D2-KARAN-92917:~/CDAC$ ls
1.txt 2.txt 3.txt 4.txt Day-1 Day-2 demo2.txt one OS
karan@D2-KARAN-92917:~/CDAC$ 1.txt -a
1.txt: command not found
karan@D2-KARAN-92917:~/CDAC$ stat 1.txt
  File: 1.txt
  Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 1030ah/66314d Inode: 1708361    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2025-10-25 15:33:11.363368680 +0530
Modify: 2025-10-25 15:33:11.363368680 +0530
Change: 2025-10-25 15:33:11.363368680 +0530
 Birth: 2025-10-25 15:33:11.363368680 +0530
karan@D2-KARAN-92917:~/CDAC$ touch 1.txt
karan@D2-KARAN-92917:~/CDAC$ stat 1.txt
  File: 1.txt
  Size: 0          Blocks: 0          IO Block: 4096   regular empty file
Device: 1030ah/66314d Inode: 1708361    Links: 1
Access: (0664/-rw-rw-r--)  Uid: ( 1000/   karan)   Gid: ( 1000/   karan)
Access: 2025-10-25 15:35:58.245729493 +0530
Modify: 2025-10-25 15:35:58.245729493 +0530
Change: 2025-10-25 15:35:58.245729493 +0530
 Birth: 2025-10-25 15:33:11.363368680 +0530
karan@D2-KARAN-92917:~/CDAC$
```

19)sort:

```
karan@D2-KARAN-92917:~/CDAC$ cat demo.txt
Banana
Apple
Banana
Mango
Pineapple
Apple
Grapes
Orange
Apple
Pineapple
Cherry
Grapes

karan@D2-KARAN-92917:~/CDAC$ sort demo.txt

Apple
Apple
Apple
Banana
Banana
Cherry
Grapes
Grapes
Mango
Orange
Pineapple
Pineapple
karan@D2-KARAN-92917:~/CDAC$
```

20)uniq:

```
karan@D2-KARAN-92917:~/CDAC$ sort demo.txt | uniq
Apple
Banana
Cherry
Grapes
Mango
Orange
Pineapple
karan@D2-KARAN-92917:~/CDAC$ sort demo.txt | uniq -c
      1
      3 Apple
      2 Banana
      1 Cherry
      2 Grapes
      1 Mango
      1 Orange
      2 Pineapple
karan@D2-KARAN-92917:~/CDAC$ sort demo.txt | uniq -d
Apple
Banana
Grapes
Pineapple
karan@D2-KARAN-92917:~/CDAC$
```

21)head:

```
karan@D2-KARAN-92917:~/CDAC$ head demo.txt
Banana
Apple
Banana
Mango
Pineapple
Apple
Grapes
Orange
Apple
Pineapple
karan@D2-KARAN-92917:~/CDAC$ head -n 2 demo.txt
Banana
Apple
karan@D2-KARAN-92917:~/CDAC$ head -n 5 demo.txt
Banana
Apple
Banana
Mango
Pineapple
karan@D2-KARAN-92917:~/CDAC$
```

22)tail:

```
karan@D2-KARAN-92917:~/CDAC$ tail demo.txt
Mango
Pineapple
Apple
Grapes
Orange
Apple
Pineapple
Cherry
Grapes
karan@D2-KARAN-92917:~/CDAC$ tail -n 2 demo.txt
Grapes
karan@D2-KARAN-92917:~/CDAC$ tail -n 5 demo.txt
Apple
Pineapple
Cherry
Grapes
karan@D2-KARAN-92917:~/CDAC$
```


23)factor:

```
karan@D2-KARAN-92917:~/CDAC$ factor 2
2: 2
karan@D2-KARAN-92917:~/CDAC$ factor 10
10: 2 5
karan@D2-KARAN-92917:~/CDAC$ factor 100
100: 2 2 5 5
karan@D2-KARAN-92917:~/CDAC$ factor 15
15: 3 5
karan@D2-KARAN-92917:~/CDAC$
```

24)alias:

```
karan@D2-KARAN-92917:~/CDAC$ alias ls 'l'
alias ls='ls --color=auto'
alias l='ls -CF'
karan@D2-KARAN-92917:~/CDAC$ l
Day-1/ Day-2/ demo2.txt demo.txt one/ 05/ sdm/
```

25) unalias:

```
karan@D2-KARAN-92917:~/CDAC$ unalias l
karan@D2-KARAN-92917:~/CDAC$ l
l: command not found
karan@D2-KARAN-92917:~/CDAC$
```

26) echo:

```
karan@D2-KARAN-92917:~/CDAC$ echo
karan@D2-KARAN-92917:~/CDAC$ echo 123456799
123456799
karan@D2-KARAN-92917:~/CDAC$ echo hello world
hello world
karan@D2-KARAN-92917:~/CDAC$
```

27) kill:

```
karan@D2-KARAN-92917:~/CDAC$ kill 123
bash: kill: (123) - Operation not permitted
karan@D2-KARAN-92917:~/CDAC$
```

28) env:

```
karan@D2-KARAN-92917:~/CDAC$ env
SHELL=/bin/bash
SESSION_MANAGER=local/D2-KARAN-92917:@/tmp/.ICE-unix/1675,unix/D2-KARAN-92917:/tmp/.ICE-unix/1675
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-is-deprecated
LANGUAGE=en_IN:en
GNOME_SHELL_SESSION_MODE=ubuntu
SSH_AUTH_SOCK=/run/user/1000/keyring/ssh
XMODIFIERS=@im=ibus
DESKTOP_SESSION=ubuntu
GTK_MODULES=gail:atk-bridge
DBUS_STARTER_BUS_TYPE=session
PWD=/home/karan/CDAC
LOGNAME=karan
XDG_SESSION_DESKTOP=ubuntu
XDG_SESSION_TYPE=wayland
SYSTEMD_EXEC_PID=1675
XAUTHORITY=/run/user/1000/.mutter-Xwaylandauth.ZYSQE3
HOME=/home/karan
USERNAME=karan
IM_CONFIG_PHASE=1
LANG=en_IN
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01
:mi=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=0
1;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31
:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;
31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.d
eb=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:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.
esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.p
gm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=0
1;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;3
5:*.webm=01;35:*.webp=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.
nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=
01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.
ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3
=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;
36:
XDG_CURRENT_DESKTOP=ubuntu:GNOME
VTE_VERSION=6800
WAYLAND_DISPLAY=wayland-0
GNOME_TERMINAL_SCREEN=/org/gnome/Terminal/screen/d60b941c_4fd5_4358_abd2_7b7cdde9cd19
GNOME_SETUP_DISPLAY=:1
LESSCLOSE=/usr/bin/lesspipe %s %s
XDG_SESSION_CLASS=user
```