

Assignment 1

1. Ubuntu , RedHat and Centos.
2. The man command in Unix/Linux is used to display the user manual of any command that you can run on the system. It provides detailed documentation about commands, including their usage, options.
3. rm command
Write: man rm

```
RM(1)                                User Commands                                RM(1)
NAME
  rm - remove files or directories
SYNOPSIS
  rm [OPTION]... [FILE]...
DESCRIPTION
  This manual page documents the GNU version of rm.  rm removes each specified file.  By default, it does not remove directories.
  If the -I or --interactive=once option is given, and there are more than three files or the -f, -R, or --recursive are given, then rm prompts the user for whether to proceed with the entire operation.  If the response is not affirmative, the entire command is aborted.
  Otherwise, if a file is unwritable, standard input is a terminal, and the -f or --force option is not given, or the -i or --interactive=always option is given, rm prompts the user for whether to remove the file.  If the response is not affirmative, the file is skipped.
OPTIONS
  Remove (unlink) the FILE(s).
  -f, --force
    ignore nonexistent files and arguments, never prompt
  -i
    prompt before every removal
  -I
    prompt once before removing more than three files, or when removing recursively; less intrusive than -i, while still giving protection against most mistakes
  --interactive=WHEN
    prompt according to WHEN: never, once (-I), or always (-i); without WHEN, prompt always
  --one-file-system
    when removing a hierarchy recursively, skip any directory that is on a file system different from that of the corresponding command line argument
  --no-preserve-root
    do not treat '/' specially
  --preserve-root[=all]
    do not remove '/' (default); with 'all', reject any command line argument on a separate device from its parent
  -r, -R, --recursive
    remove directories and their contents recursively
  -d, --dir
    remove empty directories
  -v, --verbose
    explain what is being done
  --help
    display this help and exit
Manual page rm(1) line 1 (press h for help or q to quit)
```

rmdir command
Write : man rmdir

```
RNDIR(1)                                User Commands                                RNDIR(1)

NAME
    rndir - remove empty directories

SYNOPSIS
    rndir [OPTION]... DIRECTORY...

DESCRIPTION
    Remove the DIRECTORY(ies), if they are empty.

    --ignore-fail-on-non-empty
        ignore each failure that is solely because a directory
        is non-empty

    -p, --parents
        remove DIRECTORY and its ancestors; e.g., 'rndir -p a/b/c' is similar to 'rndir a/b/c a/b a'

    -v, --verbose
        output a diagnostic for every directory processed

    --help
        display this help and exit

    --version
        output version information and exit

AUTHOR
    Written by David Mackenzie.

REPORTING BUGS
    GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
    Report any translation bugs to <https://translationproject.org/team/>

COPYRIGHT
    Copyright © 2020 Free Software Foundation, Inc.  License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
    This is free software: you are free to change and redistribute it.  There is NO WARRANTY, to the extent permitted by law.

SEE ALSO
    rndir(2)

    Full documentation <https://www.gnu.org/software/coreutils/rmdir>
    or available locally via: info '(coreutils) rmdir invocation'

GNU coreutils 8.32
Manual page rndir(1) line 3/46 (END) (press h for help or q to quit)

February 2024                                RNDIR(1)
```

4. a.

```
> ls -R
.:
Desktop dir1 docs Documents Downloads Music Pictures Public snap Templates Videos

./Desktop:

./dir1:
dir11 dir12

./dir1/dir11:
file1

./dir1/dir11/file1:

./dir1/dir12:

./docs:
mycv

./Documents:
OldFiles
```

b. I can't remove it because it is not empty so I need to remove what is in it first.

```

~
> rmdir dir1/dir11
rmdir: failed to remove 'dir1/dir11': Directory not empty

~
> rm dir1/dir11/file1
rm: cannot remove 'dir1/dir11/file1': Is a directory

~
> rm dir1/dir11/file1
rm: cannot remove 'dir1/dir11/file1': Is a directory

~
> rmdir dir1/dir11/file1

~
> rmdir dir1/dir11

~
> 

```

c. This command won't work because OldFiles isn't a directory.

```

~
> rmdir -p Documents/OldFiles
rmdir: failed to remove 'Documents/OldFiles': Not a directory

```

I should try :

```

~
> rm Documents/OldFiles

```

d. Absolute path : /home/user/docs/mycv
Relative path : docs/mycv

5.

```

/🔒
> cp etc/passwd ~/mypasswd

/🔒
> ls ~
Desktop    Downloads  mypasswd  Public    Templates
Documents  Music      Pictures  snap      Videos

```

6.

```
/usr/bin 🛡️ via 🦆 v3.10.12  
> mv ~/mypasswd ~/oldpasswd
```

7.

```
/usr/bin 🛡️ via 🦆 v3.10.12  
> cd $HOME
```

```
~  
> █
```

```
/usr/bin 🛡️ via 🦆 v3.10.12  
> cd
```

```
~  
> █
```

```
/usr/bin 🛡️ via 🦆 v3.10.12  
> cd ~
```

```
~  
> █
```

```
/usr/bin 🛡️ via 🦆 v3.10.12  
> cd /home/aliaa
```

```
~  
> █
```

8.

```
~  
> ls /usr/bin/w*  
/usr/bin/w                /usr/bin/which.debianutils  
/usr/bin/w3m              /usr/bin/whiptail  
/usr/bin/w3mman           /usr/bin/who  
/usr/bin/wall             /usr/bin/whoami  
/usr/bin/watch            /usr/bin/whoopsie  
/usr/bin/watchgnupg       /usr/bin/whoopsie-preferences  
/usr/bin/wbmtopbm         /usr/bin/winicontoppm  
/usr/bin/wc               /usr/bin/word-list-compress  
/usr/bin/wdctl            /usr/bin/wpa_passphrase  
/usr/bin/wget             /usr/bin/write  
/usr/bin/whatis           /usr/bin/write.ul  
/usr/bin/whereis          /usr/bin/www-browser  
/usr/bin/which
```

9. The type command in Linux is used to determine the type of a command or a command's source.

```
> type cd  
cd is a shell builtin
```

10.

```
> ls /usr/bin/c*  
/usr/bin/c++                /usr/bin/calibrate_gps    /usr/bin/cd-its          /usr/bin/chfn             /usr/bin/clear           /usr/bin/cmm             /usr/bin/convert          /usr/bin/cpupower  
/usr/bin/c89               /usr/bin/canberra-gtk-play /usr/bin/c++filt         /usr/bin/chgrp            /usr/bin/clear_console  /usr/bin/compare         /usr/bin/convert-lm6     /usr/bin/c_rehash  
/usr/bin/c89-gcc           /usr/bin/cancel           /usr/bin/chacl           /usr/bin/chmod            /usr/bin/cnake           /usr/bin/compare-lm6     /usr/bin/convert-lm6.q16 /usr/bin/crontab  
/usr/bin/c99               /usr/bin/captoinfo        /usr/bin/chafa           /usr/bin/choon            /usr/bin/cnp             /usr/bin/compare-lm6.q16 /usr/bin/corelist        /usr/bin/csplit  
/usr/bin/c99-gcc           /usr/bin/cat              /usr/bin/chage           /usr/bin/choom            /usr/bin/compose         /usr/bin/compose         /usr/bin/cp              /usr/bin/cstat  
/usr/bin/cacaclock         /usr/bin/catman           /usr/bin/chardet         /usr/bin/chrt             /usr/bin/codepage        /usr/bin/composite       /usr/bin/cpack           /usr/bin/ctstat  
/usr/bin/cacaden0         /usr/bin/cautious-launcher /usr/bin/chardetect      /usr/bin/chvt             /usr/bin/composite-lm6   /usr/bin/composite-lm6.q16 /usr/bin/cpan           /usr/bin/cupstestppd  
/usr/bin/cacafire         /usr/bin/cc               /usr/bin/chattr          /usr/bin/chvt             /usr/bin/composite-lm6.q16 /usr/bin/cpan5.34-x86_64-linux-gnu /usr/bin/curl  
/usr/bin/cacacplay        /usr/bin/cd-create-profile /usr/bin/cheon           /usr/bin/cjtsort          /usr/bin/conjure         /usr/bin/cpio            /usr/bin/cut  
/usr/bin/cacaserver        /usr/bin/cd-fix-profile   /usr/bin/check-language-support /usr/bin/ckbcomp         /usr/bin/conjure-lm6     /usr/bin/cpp             /usr/bin/cvt  
/usr/bin/cacaview         /usr/bin/cd-icddump       /usr/bin/cheese          /usr/bin/cksun            /usr/bin/conjure-lm6.q16 /usr/bin/cpp-11          /usr/bin/cvtsudoers
```

11.

```

~
> man -k read
__freadable (3) - interfaces to stdio FILE structure
__freading (3) - interfaces to stdio FILE structure
__llseek (2) - reposition read/write file offset
__sysctl (2) - read/write system parameters
accessdb (8) - dumps the content of a man-db database in a human readable format
aio_read (3) - asynchronous read
amidi (1) - read from and write to ALSA RawMIDI ports
arch_prctl (2) - set architecture-specific thread state
capget (2) - set/get capabilities of thread(s)
capset (2) - set/get capabilities of thread(s)
ddstdecode (1) - Decode a Ricoh DDST stream into human readable form.
dpkg-reconfigure (8) - reconfigure an already installed package
endaliasent (3) - read an alias entry
eventfd_read (3) - create a file descriptor for event notification
exit_group (2) - exit all threads in a process
fc-cat (1) - read font information cache files
fgetwc (3) - read a wide character from a FILE stream
fgetws (3) - read a wide-character string from a FILE stream
file2brl (1) - Translate an xml or a text file into an embosser-ready braille file
fread (3) - binary stream input/output
fread_unlocked (3) - nonlocking stdio functions
fts_read (3) - traverse a file hierarchy
get_mempolicy (2) - retrieve NUMA memory policy for a thread
get_thread_area (2) - manipulate thread-local storage information
getaliasbyname (3) - read an alias entry
getaliasbyname_r (3) - read an alias entry
getaliasent (3) - read an alias entry
getaliasent_r (3) - read an alias entry
getcpu (2) - determine CPU and NUMA node on which the calling thread is running
gettid (2) - get thread identification
getwc (3) - read a wide character from a FILE stream
getwchar (3) - read a wide character from standard input
gipddcode (1) - Decode a GIPD stream into human readable form.

```

12. The apropos command in Linux is used to search the manual page descriptions for a specified keyword.

13.

```
~  
> nano script.sh  
  
~ took 4m15s  
> cat script.sh  
#!/bin/bash  
  
#Create a directory called "myDirectory" in your home folder  
mkdir -p ~/myDirectory  
  
#Inside "myDirectory," create another directory named "secondDirectory"  
mkdir -p ~/myDirectory/secondDirectory  
  
#Within "secondDirectory," create a file named "myNotePaper"  
touch ~/myDirectory/secondDirectory/myNotePaper  
  
#Copy "myNotePaper" from "secondDirectory" to "myDirectory"  
cp ~/myDirectory/secondDirectory/myNotePaper ~/myDirectory/  
  
#Rename the copied file in "myDirectory" to "myOldNotePaper"  
mv ~/myDirectory/myNotePaper ~/myDirectory/myOldNotePaper  
  
# Notify the user that the script has completed  
echo "Script executed successfully. All tasks are completed!"  
  
~  
> chmod +x script.sh
```

```
~  
> ./script.sh  
Script executed successfully. All tasks are completed!
```

