- List 3 Linux Distribution :
    - Ubuntu
    - Fedora
    - Red Hat
- what is the **man** command used for
    - manual (external command)
- What is the difference between rm and rmdir using man command?
    - rm : remove files
    - rmdir : remove empty directory
- Create the following hierarchy under your home directory: (dir1 , docs , Documents

```
yara@yara: ~

yara@yara:~$ pwd
/home/yara
yara@yara:~$ mkdir dir1 docs
yara@yara:~$ ls
Desktop   docs          Downloads     ITIEmbedded  Music      Public  Templates
dir1      Documents     Embinux_cpp   mbr.bin      Pictures   snap    Videos
yara@yara:~$
```

```
yara@yara: ~/docs

yara@yara:~$ pwd
/home/yara
yara@yara:~$ ls
Desktop       Downloads     ITIEmbedded  Music      Public  Templates
Documents     Embinux_cpp   mbr.bin      Pictures   snap    Videos
yara@yara:~$ mkdir dir1 docs && ls
Desktop   docs          Downloads     ITIEmbedded  Music      Public  Templates
dir1      Documents     Embinux_cpp   mbr.bin      Pictures   snap    Videos
yara@yara:~$ cd dir1/&& mkdir dir1{1..2}
yara@yara:~/dir1$ cd dir11/&& touch file1 && ls
file1
yara@yara:~/dir1/dir11$ cd ../../docs && touch mycv && ls
mycv
yara@yara:~/docs$ pwd
/home/yara/docs
yara@yara:~/docs$
```

```
yara@yara:~$ pwd
/home/yara
yara@yara:~$ ls
Desktop      Downloads     ITIEmbedded   Music       Public   Templates
Documents  Embinux_cpp   mbr.bin         Pictures    snap     Videos
yara@yara:~$ mkdir dir1 docs && ls
Desktop   docs          Downloads      ITIEmbedded   Music        Public   Templates
dir1      Documents   Embinux_cpp   mbr.bin         Pictures    snap     Videos
yara@yara:~$ cd dir1/&& mkdir dir1{1..2}
yara@yara:~/dir1$ cd dir11/&& touch file1 && ls
file1
yara@yara:~/dir1/dir11$ cd ../../docs && touch mycv && ls
mycv
yara@yara:~/docs$ pwd
/home/yara/docs
yara@yara:~/docs$ cd ../Documents/ && touch OldFiles && ls
OldFiles
yara@yara:~/Documents$ pwd
/home/yara/Documents
```

- Remove dir11 with rmdir in one-step

  This command didn't work because it can remove empty directory only

```
yara@yara:~/Documents$ cd ../dir1
yara@yara:~/dir1$ rmdir dir11/
rmdir: failed to remove 'dir11/': Directory not empty
yara@yara:~/dir1$
```

  But we can do it using this command " rm -r dirname "

```
yara@yara:~/dir1$ rm -r dir11/
yara@yara:~/dir1$ ls
dir12
yara@yara:~/dir1$
```

- Remove OldFiles using rmdir –p command. State what happened to the hierarchy

  Hierarchy 'll not change because this commnd work with directory OldFiles is file

```
yara@yara:~/dir1$ cd ../Documents/
yara@yara:~/Documents$ ls
OldFiles
yara@yara:~/Documents$ rmdir -p OldFiles
rmdir: failed to remove '-p': No such file or directory
rmdir: failed to remove 'OldFiles': Not a directory
```

- Write the absolute and relative path for the file mycv

```
yara@yara:~$ pwd
/home/yara
yara@yara:~$ cd docs/
yara@yara:~/docs$ ls
mycv
yara@yara:~/docs$ pwd
/home/yara/docs
yara@yara:~/docs$
```

- Copy the /etc/passwd file to your home directory making its name is mypasswd
- Rename this new file to be oldpasswd

```
yara@yara:~$ pwd
/home/yara
yara@yara:~$ cd /
yara@yara:/$ pwd
/
yara@yara:/$ ls
bin    cdrom   etc    lib     lost+found  mnt   proc   run    snap   swap.img   tmp   var
boot   dev     home   lib64   media       opt   root   sbin   srv    sys        usr
yara@yara:/$ cd etc/
yara@yara:/etc$ cp passwd ~/oldpasswd
yara@yara:/etc$ cd ~
yara@yara:~$ ls
Desktop   Documents     ITIEmbedded   oldpasswd   snap
dir1      Downloads     mbr.bin       Pictures    Templates
docs      Embinux_cpp   Music         Public      Videos
yara@yara:~$
```

- You are in /usr/bin, list four ways to go to your home directory

```
yara@yara:~$ cd /usr/bin
yara@yara:/usr/bin$ cd ~
yara@yara:~$ cd /usr/bin
yara@yara:/usr/bin$ cd
yara@yara:~$ cd /usr/bin
yara@yara:/usr/bin$ cd ../../home/yara
yara@yara:~$ cd /usr/bin
yara@yara:/usr/bin$ cd $HOME
yara@yara:~$
```

- List Linux commands in /usr/bin that start with letter w

```
yara@yara:~$ cd /usr/bin
yara@yara:/usr/bin$ ls w*
w               wdctl       which.debianutils   whoopsie-preferences   wpctl
wall            wget        whiptail            wifi                   wpexec
watch           whatis      who                 wireplumber            write
watchgnupg      whereis     whoami              word-list-compress     wwan
wc              which       whoopsie            wpa_passphrase
```

- What command type are used for?

  Internal & external

```
yara@yara:~$ pwd
/home/yara
yara@yara:~$ type cd
cd is a shell builtin
yara@yara:~$ type  rm
rm is hashed (/usr/bin/rm)
yara@yara:~$
```

- Show 2 types of command file in /usr/bin that start with letter c

```
Hello yara :)
yara@yara:~$ cd / && ls usr/bin/c*
usr/bin/c++                     usr/bin/ciptool
usr/bin/c89                     usr/bin/ckbcomp
usr/bin/c89-gcc                 usr/bin/cksum
usr/bin/c99                     usr/bin/clear
usr/bin/c99-gcc                 usr/bin/clear_console
usr/bin/calibrate_ppa           usr/bin/cloud-id
usr/bin/canberra-gtk-play       usr/bin/cloud-init
usr/bin/cancel                  usr/bin/cloud-init-per
usr/bin/captoinfo               usr/bin/cmp
usr/bin/cat                     usr/bin/codepage
usr/bin/catman                  usr/bin/col
usr/bin/cautious-launcher       usr/bin/colcrt
usr/bin/cc                      usr/bin/colormgr
usr/bin/cd-create-profile       usr/bin/colrm
usr/bin/cd-fix-profile          usr/bin/column
usr/bin/cd-iccdump              usr/bin/comm
```

- Using man command find the command to read file.

```
root@Yara:~# man -k read
proc_pid_task (5)      - thread information
accessdb (8)           - dumps the content of a man-db database in a human readable format
dpkg-reconfigure (8) - reconfigure an already installed package
erofs (5)              - the Enhanced Read-Only File System
fc-cat (1)             - read font information cache files
git-describe (1)       - Give an object a human readable name based on an available ref
git-prune-packed (1) - Remove extra objects that are already in pack files
git-read-tree (1)      - Reads tree information into the index
git-symbolic-ref (1) - Read, modify and delete symbolic refs
info (1)               - read Info documents
info (5)               - readable online documentation
infobrowser (1)        - read Info documents
netplan-get (8)        - read merged Netplan YAML configuration
nptl (7)               - Native POSIX Threads Library
numfmt (1)             - Convert numbers from/to human-readable strings
openssl-threads (7ssl) - Overview of thread safety in OpenSSL
pam_systemd_loadkey (8) - Read password from kernel keyring and set it as PAM authtok
proc_thread-self (5) - thread information
proc_tid (5)           - thread information
pthreads (7)           - POSIX threads
rwarray (3am)          - write and read gawk arrays to/from files
readdir (3am)          - directory input parser for gawk
readelf (1)            - display information about ELF files
readfile (3am)         - return the entire contents of a file as a string
readline (3readline) - get a line from a user with editing
readlink (1)           - print resolved symbolic links or canonical file names
readprofile (8)        - read kernel profiling information
sprof (1)              - read and display shared object profiling data
tee (1)                - read from standard input and write to standard output and files
```

- What is the usage of apropos command?

apropos command helps the user when they don't remember the exact command but knows a few keywords related to the command that define its uses or functionality. It searches the Linux man page with the help of the keyword provided by the user to find the command and its functions.

Syntax: apropos [OPTION..] KEYWORD...

```
root@Yara:~# apropos read
proc_pid_task (5)      - thread information
accessdb (8)           - dumps the content of a man-db database in a human readable format
dpkg-reconfigure (8) - reconfigure an already installed package
erofs (5)              - the Enhanced Read-Only File System
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```