

Q1. List 3 Linux Distros

Ubuntu – Red Hat – Fedora

Q2. Man command:

System-wide documentation system that provides short reference manuals (pages) for individual

commands, API functions, concepts, configuration file syntax, file formats and is organized in sections

(1 for user commands, 2 for system calls...). That's the traditional Unix documentation system.

Q3. RM:

Remove files or directories

Options:

-r --> remove directories and their contents recursively

Rmdir:

Removes empty directories

Options:

-p, --parents

remove DIRECTORY and its ancestors; e.g., 'rmdir -p a/b/c' is

similar to 'rmdir a/b/c a/b a'

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

Q4

```
root@OMAR-PC:/home# cd /home/dir1/
root@OMAR-PC:/home/dir1# mkdir dir11 dir12
root@OMAR-PC:/home/dir1# cd /home/dir1/dir11
root@OMAR-PC:/home/dir1/dir11# touch file1.txt
root@OMAR-PC:/home/dir1/dir11# cd ../
root@OMAR-PC:/home/dir1# rmdir dir11
rmdir: failed to remove 'dir11': Directory not empty
root@OMAR-PC:/home/dir1# cd /
bin/      etc/      lib64/    mnt/      run/      sys/
boot/     home/     libx32/   opt/      sbin/     tmp/
cdrom/    lib/      lost+found/ proc/     snap/     usr/
dev/      lib32/    media/    root/     srv/      var/
root@OMAR-PC:/home/dir1# cd /
bin/      etc/      lib64/    mnt/      run/      sys/
boot/     home/     libx32/   opt/      sbin/     tmp/
cdrom/    lib/      lost+found/ proc/     snap/     usr/
dev/      lib32/    media/    root/     srv/      var/
root@OMAR-PC:/home/dir1# cd /home/dir1/dir11
root@OMAR-PC:/home/dir1/dir11# ls
file1.txt
root@OMAR-PC:/home/dir1/dir11# rm *
root@OMAR-PC:/home/dir1/dir11# cd ../
root@OMAR-PC:/home/dir1# rmdir dir11
root@OMAR-PC:/home/dir1# ls
dir12
root@OMAR-PC:/home/dir1#
```

```
root@OMAR-PC:/home# pwd
/home
root@OMAR-PC:/home# ls
dir1 docs documents omar
root@OMAR-PC:/home# cd docs
root@OMAR-PC:/home/docs# ls
mycv.pdf
root@OMAR-PC:/home/docs#
```

```
root@OMAR-PC:/home# cd documents/
root@OMAR-PC:/home/documents# ls
OldFiles.xlsx
root@OMAR-PC:/home/documents#
```

. The output of the command `pwd` was `/home/user`. Write the absolute and relative path for the file `mycv`

`/home/omar/docs/mycv.pdf`

5. Q5. Copy the `/etc/passwd` file to your home directory making its name is `mypasswd`

```
omar@OMAR-PC:/etc$ cp passwd /home/omar/mypasswd
omar@OMAR-PC:/etc$ cd /home/omar/
omar@OMAR-PC:~$ ls
Desktop  dir1  Documents  Downloads  inkscape.desktop  LibrePCB-Workspace  Music  mypasswd  Pictures  Public  snap  Templates  Videos
omar@OMAR-PC:~$ cat mypasswd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:,:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111::/home/syslog:/usr/sbin/nologin
_apt:x:105:65534:,:/nonexistent:/usr/sbin/nologin
_apt:x:106:112:,:/nonexistent:/usr/sbin/nologin
```

Q6.

```
omar@OMAR-PC:~$ pwd
/home/omar
omar@OMAR-PC:~$ ls
Desktop  dir1  Documents  Downloads  inkscape.desktop  LibrePCB-Workspace  Music  mypasswd  Pictures  Public  snap  Templates  Videos
omar@OMAR-PC:~$ mv mypasswd OldPasswd
omar@OMAR-PC:~$ ls
Desktop  dir1  Documents  Downloads  inkscape.desktop  LibrePCB-Workspace  Music  OldPasswd  Pictures  Public  snap  Templates  Videos
omar@OMAR-PC:~$
```

Q7.

```

omar@OMAR-PC:/usr/bin$ pwd
/usr/bin
omar@OMAR-PC:/usr/bin$ cd ~
omar@OMAR-PC:~$ pwd
/home/omar
omar@OMAR-PC:~$ cd /usr/bin/
omar@OMAR-PC:/usr/bin$ cd ../
bin/  games/  include/  lib/      lib32/  lib64/  libexec/  libx32/  local/  sbin/  share/  src/
omar@OMAR-PC:/usr/bin$ cd ../../home/omar/
omar@OMAR-PC:~$ pwd
/home/omar
omar@OMAR-PC:~$ cd /usr/bin/
omar@OMAR-PC:/usr/bin$ cd /home/omar/
omar@OMAR-PC:~$ pwd
/home/omar
omar@OMAR-PC:~$ cd /usr/bin/
omar@OMAR-PC:/usr/bin$ cd ../../
omar@OMAR-PC:$ cd home/omar/
omar@OMAR-PC:~$ pwd
/home/omar
omar@OMAR-PC:~$

```

Q8.

```

omar@OMAR-PC:/usr/bin$ pwd
/usr/bin
omar@OMAR-PC:/usr/bin$ ls w*
w  watch  wc  wget  whereis  which.debianutils  who  whoopsie  wish  word-list-compress  write
wall  watchgnupg  wdcctl  whatis  which  whiptail  whoami  whoopsie-preferences  wish8.6  wpa_passphrase  write.ul
omar@OMAR-PC:/usr/bin$

```

Q9.

- Command type
- type

Display information about command type

Q10.

```

omar@OMAR-PC:/usr/bin$ pwd
/usr/bin
omar@OMAR-PC:/usr/bin$ ls c* | head -n 2
c++
c89
omar@OMAR-PC:/usr/bin$

```

Q11.

Man -k

Q12.

The apropos command is used in Linux to search the manual pages for a given keyword or topic. It is particularly helpful when you need to find commands or programs related to a specific functionality but do not know the exact command name.

```
omar@OMAR-PC:~$ cd /home/omar/
omar@OMAR-PC:~$ ls
Desktop      Downloads      Music          Pictures      Templates
dir1         inkscape.desktop  myDirectory    Public        test_shell.sh
Documents    LibrePCB-Workspace  OldPasswd     snap          Videos
omar@OMAR-PC:~$ cat test_shell.sh
#!/bin/bash

# Step 1: Create "myDirectory" in the home folder
mkdir -p ~/myDirectory

# Step 2: Inside "myDirectory," create "secondDirectory"
mkdir -p ~/myDirectory/secondDirectory

# Step 3: Within "secondDirectory," create a file named "myNotePaper"
touch ~/myDirectory/secondDirectory/myNotePaper

# Step 4: Copy "myNotePaper" to "myDirectory"
cp ~/myDirectory/secondDirectory/myNotePaper ~/myDirectory/

# Step 5: Rename the copied file to "myOldNotePaper"
mv ~/myDirectory/myNotePaper ~/myDirectory/myOldNotePaper

echo "Script executed successfully."
omar@OMAR-PC:~$ chmod +x test_shell.sh
omar@OMAR-PC:~$ ./test_shell.sh
Script executed successfully.
omar@OMAR-PC:~$
```