

PRACTICE QUESTIONS
CYCLE 1
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Question 1: Display your current directory.

Output:

```
rwthik@Zeus ~  
» pwd  
/home/rwthik  
rwthik@Zeus ~  
»
```

Question 2: Change to /etc directory.

Output:

```
rwthik@Zeus ~  
» cd /etc  
rwthik@Zeus /etc  
»
```

Question 3: Change to home directory using a single command.

Output:

```
rwthik@Zeus /etc
» cd
rwthik@Zeus ~
»
```

Question 4: Change to the parent directory of the current directory.

Output:

```
rwthik@Zeus ~
» cd ..
rwthik@Zeus /home
»
```

Question 5: Go to the root directory.

Output:

```
rwthik@Zeus /home
» cd /
rwthik@Zeus /
»
```

Question 6: Give a long listing of the root directory.

Output:

```
rwthik@Zeus /
» ls -Al
total 97
lrwxrwxrwx 1 root root 7 Sep 30 12:55 bin -> usr/bin
drwxr-xr-x 5 root root 1024 Feb 12 22:19 boot
-rw-r--r-- 1 root root 16845 Apr 16 2018 desktopfs-pkgs.txt
drwxr-xr-x 19 root root 3300 Feb 18 13:28 dev
drwxr-xr-x 97 root root 12288 Feb 18 17:44 etc
drwxr-xr-x 4 root root 4096 Jan 9 10:38 home
lrwxrwxrwx 1 root root 7 Sep 30 12:55 lib -> usr/lib
lrwxrwxrwx 1 root root 7 Sep 30 12:55 lib64 -> usr/lib
drwx----- 2 root root 16384 Jan 9 10:34 lost+found
-rw-r--r-- 1 root root 7 Apr 16 2018 .manjaro-tools
drwxr-xr-x 2 root root 4096 Nov 27 2017 mnt
drwxr-xr-x 6 root root 4096 Feb 2 15:29 opt
dr-xr-xr-x 166 root root 0 Feb 18 13:28 proc
drwxr-xr-x 14 root root 4096 Feb 15 22:26 root
-rw-r--r-- 1 root root 3973 Apr 16 2018 rootfs-pkgs.txt
drwxr-xr-x 25 root root 640 Feb 18 18:42 run
lrwxrwxrwx 1 root root 7 Sep 30 12:55/sbin -> usr/bin
drwxr-xr-x 4 root root 4096 Apr 16 2018 srv
dr-xr-xr-x 13 root root 0 Feb 18 13:28 sys
drwxrwxrwt 14 root root 340 Feb 18 19:33 tmp
drwxr-xr-x 10 root root 4096 Feb 18 12:28 usr
```

Question 7: Give a listing of the last 10 files of the root directory.

Output:

```
rwthik@Zeus /
» ls -Al | tail
dr-xr-xr-x 167 root root    0 Feb 18 13:28 proc
drwxr-x-- 14 root root 4096 Feb 15 22:26 root
-rw-r--r-- 1 root root 3973 Apr 16 2018 rootfs-pkgs.txt
drwxr-xr-x 25 root root   640 Feb 18 18:42 run
lrwxrwxrwx 1 root root    7 Sep 30 12:55 sbin -> usr/bin
drwxr-xr-x 4 root root 4096 Apr 16 2018 srv
dr-xr-xr-x 13 root root    0 Feb 18 13:28 sys
drwxrwxrwt 14 root root   340 Feb 18 19:33 tmp
drwxr-xr-x 10 root root 4096 Feb 18 12:28 usr
drwxr-xr-x 12 root root 4096 Feb 18 13:28 var
rwthik@Zeus /
»
```

Question 8: Stay where you are, and list the contents of /etc.

Output:

```
drwxr-xr-x 10 root root 4096 Feb 18 12:28 usr
drwxr-xr-x 12 root root 4096 Feb 18 13:28 var
rwthik@Zeus /
» ls /etc
acpi                manjaro-firefox-developer-edition.ini
adjtime             manjaro-firefox.ini
alsa               manjaro-firefox-kde.ini
anacrontab         manjaro-release
apparmor.d         manjaro-thunderbird.ini
arch-release       mdadm.conf
at.deny            mime.types
audisp             mke2fs.conf
audit             mkinitcpio.conf
avahi              mkinitcpio.d
bash.bash_logout  modprobe.d
bash.bashrc       modules-load.d
bindresvport.blacklist motd
binfmt.d          mpv
bluetooth         mtab
ca-certificates   nanorc
cifs-utils        ndctl
conf.d            netconfig
cpufreq-bench.conf netctl
cron.d            NetworkManager
```

Question 9: Create a directory testdir in your home directory.

Output:

```
rwthik@Zeus /  
» mkdir ~/testdir  
rwthik@Zeus /  
»
```

Question 10: Change to the /etc directory, stay there and create a directory newdir in your home directory(using a single command).

Output:

```
rwthik@Zeus /  
» cd /etc  
rwthik@Zeus /etc  
» mkdir ~/newdir  
rwthik@Zeus /etc  
»
```

Question 11: Create in one command the directories /dir1/dir2/dir3 (dir3 is a subdirectory from dir2, and dir2 is a subdirectory from dir1).

Output:

```
rwthik@Zeus /etc
» mkdir -p ~/dir1/dir2/dir3
rwthik@Zeus /etc
» tree ~/dir1
/home/rwthik/dir1
├─ dir2
│   └─ dir3
2 directories, 0 files
rwthik@Zeus /etc
»
```

Question 12: Display the calendar for April 2019.

Output:

```
rwthik@Zeus /etc
» cal apr 2019
    April 2019
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
rwthik@Zeus /etc
»
```

Output:

[illegible]

Output:

Question 15: Redirect the output of the above command to a new file FileList.txt.

Output:

```
rwthik@Zeus ~  
» ls -a > FileList.txt  
rwthik@Zeus ~  
» cat FileList.txt  
.  
..  
.android  
Android  
.AndroidStudio3.3  
AndroidStudioProjects  
archrice  
.audacity-data  
.bash_history  
.bash_logout  
.bash_profile  
.bashrc  
.bashrc_arch  
.cache  
.config  
Desktop  
dir1  
.dir_colors  
.dmenurc  
.dmrc
```

Question 16: Redirect the number of lines of FileList.txt to CountFile.txt.

Output:

```
rwthik@Zeus ~  
» cat FileList.txt | wc -l > CountFile.txt  
rwthik@Zeus ~  
» cat CountFile.txt  
81  
rwthik@Zeus ~  
»
```

Question 17: List all the files in your home directory starting with 's' .

Output:

```
rwthik@Zeus ~  
» ls | grep -e "^s"  
sess  
startpage  
rwthik@Zeus ~  
»
```

Question 18: List all the file-names starting with "a", "b" or "s" .

Output:

```
rwthik@Zeus ~  
» ls | grep -e "^[abc]"  
archrice  
rwthik@Zeus ~  
»
```

Output:

[illegible]

Question 21: Toggle the cases in 'Story.txt' and store it in a file 'Togglestory.txt'.

Output:

```
rwthik@Zeus ~
» cat Story.txt | tr 'a-zA-Z' 'A-Za-z' > Togglestory.txt
rwthik@Zeus ~
» cat Togglestory.txt
LOREM IPSUM DOLOR SIT AMET, CONSECTETUR ADIPISCING ELIT, SED DO EIUSMOD TEMPOR I
NCIDIDUNT UT LABORE ET DOLORE MAGNA ALIQUA. UT ENIM AD MINIM VENIAM, QUIS NOSTRU
D EXERCITATION ULLAMCO LABORIS NISI UT ALIQUIP EX EA COMMODO CONSEQUAT. DUIS AUT
E IRURE DOLOR IN REPREHENDERIT IN VOLUPTATE VELIT ESSE CILLUM DOLORE EU FUGIAT N
ULLA PARIATUR. EXCEPTEUR SINT OCCAECAT CUPIDATAT NON PROIDENT, SUNT IN CULPA QUI
OFFICIA DESERUNT MOLLIT ANIM ID EST LABORUM.
rwthik@Zeus ~
»
```

Question 22: Sort the contents of 'Countries.txt' with Capital as the primary sort key and write the sorted output to 'SortCountry.txt'.

Output:

```
rwthik@Zeus ~
» cat Countries.txt | sort -k2
Algeria: Algiers
Andorra: Andorra la Vella
Azerbaijan: Baku
Argentina: Buenos Aires
Australia: Canberra
Afghanistan: Kabul
Angola: Luanda
Albania: Tirana
Austria: Vienna
Armenia: Yerevan
rwthik@Zeus ~
»
```

Question 23: Display only the capital cities from 'Countries.txt'.

Output:

```
rwthik@Zeus ~  
» cat Countries.txt | awk '{print $2}'  
Kabul  
Tirana  
Algiers  
Andorra  
Luanda  
Buenos  
Yerevan  
Canberra  
Vienna  
Baku  
rwthik@Zeus ~  
»
```

Question 24: Locate all '.txt' and '.doc' files in the current directory .

Output:

```
rwthik@Zeus ~  
» ls -a | egrep ".*txt|.doc"  
Capstory.txt  
Countries.txt  
Story.txt  
Togglestory.txt  
rwthik@Zeus ~  
»
```

Question 25: Count the number of occurrence of 'the' in 'Story.txt'.

Output:

```
rwthik@Zeus ~  
» cat Story.txt | tr '[A-Z]' '[a-z]' | grep -o 'the' | wc -l  
0  
rwthik@Zeus ~  
» # The file Story.txt doesn't contain the word the  
rwthik@Zeus ~  
» cat Story.txt | tr '[A-Z]' '[a-z]' | grep -o 'in' | wc -l  
7  
rwthik@Zeus ~  
» # The file Story.txt contains 7 occurrences of the word in  
rwthik@Zeus ~  
» █
```