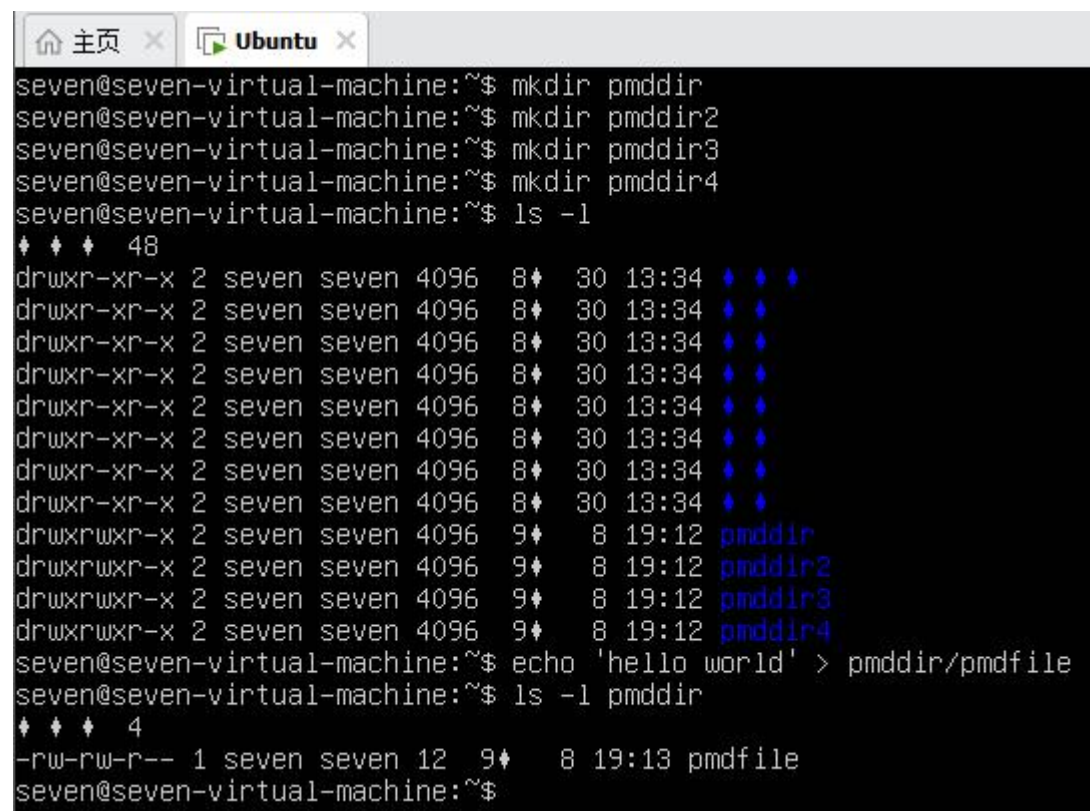


1. 查看当前系统中以“/”为根的文件目录树，并比较不同系统之间的差异
2. 使用 ls 命令列出目录下的文件
3. 使用 pwd 命令显示当前目录
4. 使用 cd 命令切换目录

```
seven@seven-virtual-machine:~$ ls -al /home
◆ ◆ ◆ 12
drwxr-xr-x  3 root  root  4096  8◆  30 13:24 .
drwxr-xr-x 20 root  root  4096  8◆  30 13:23 ..
drwxr-x--- 16 seven seven 4096  8◆  30 15:11 seven
seven@seven-virtual-machine:~$ pwd
/home/seven
seven@seven-virtual-machine:~$ cd /etc
seven@seven-virtual-machine:/etc$ cd ..
seven@seven-virtual-machine:/$ pwd
/
seven@seven-virtual-machine:/$ cd /home/seven
seven@seven-virtual-machine:~$ pwd
/home/seven
```

5. 使用 mkdir 命令创建新的目录



```
seven@seven-virtual-machine:~$ mkdir pmddir
seven@seven-virtual-machine:~$ mkdir pmddir2
seven@seven-virtual-machine:~$ mkdir pmddir3
seven@seven-virtual-machine:~$ mkdir pmddir4
seven@seven-virtual-machine:~$ ls -l
◆ ◆ ◆ 48
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096  8◆  30 13:34 ◆ ◆
drwxrwxr-x 2 seven seven 4096  9◆   8 19:12 pmddir
drwxrwxr-x 2 seven seven 4096  9◆   8 19:12 pmddir2
drwxrwxr-x 2 seven seven 4096  9◆   8 19:12 pmddir3
drwxrwxr-x 2 seven seven 4096  9◆   8 19:12 pmddir4
seven@seven-virtual-machine:~$ echo 'hello world' > pmddir/pmdfile
seven@seven-virtual-machine:~$ ls -l pmddir
◆ ◆ ◆ 4
-rw-rw-r-- 1 seven seven 12  9◆   8 19:13 pmdfile
seven@seven-virtual-machine:~$
```

6. 使用 rmdir 命令删除空的目录

7. 使用 cp 命令复制文件

```
seven@seven-virtual-machine:~$ rmdir pmddir4
seven@seven-virtual-machine:~$ ls -l
◆ ◆ ◆ 44
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxr-xr-x 2 seven seven 4096 8◆ 30 13:34 ◆ ◆
drwxrwxr-x 2 seven seven 4096 9◆ 8 19:13 pmddir
drwxrwxr-x 2 seven seven 4096 9◆ 8 19:12 pmddir2
drwxrwxr-x 2 seven seven 4096 9◆ 8 19:12 pmddir3
seven@seven-virtual-machine:~$ cp pmddir/pmdfile pmddir2
seven@seven-virtual-machine:~$ ls -l pmddir2
◆ ◆ ◆ 4
-rw-rw-r-- 1 seven seven 12 9◆ 8 19:14 pmdfile
seven@seven-virtual-machine:~$
```

8. 使用 mv 命令移动文件，修改文件名

```
seven@seven-virtual-machine:~$ mv pmddir2/pmdfile pmddir3
seven@seven-virtual-machine:~$ ls -l pmddir3
◆ ◆ ◆ 4
-rw-rw-r-- 1 seven seven 12 9◆ 8 19:14 pmdfile
seven@seven-virtual-machine:~$ rm pmddir3/pmdfile2
rm: ◆ ◆ ◆ ◆ 'pmddir3/pmdfile2': ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆
seven@seven-virtual-machine:~$ mv pmddir3/pmdfile pmddir3/pmdfile2
seven@seven-virtual-machine:~$ ls -l pmddir3
◆ ◆ ◆ 4
-rw-rw-r-- 1 seven seven 12 9◆ 8 19:14 pmdfile2
seven@seven-virtual-machine:~$ _
```

9. 使用 rm 命令删除文件

10. 使用 stat 命令显示文件详细信息

```
seven@seven-virtual-machine:~$ rm pmddir3/pmdfile2
seven@seven-virtual-machine:~$ ls -l pmddir3
◆ ◆ ◆ 0
seven@seven-virtual-machine:~$ stat pmddir/pmdfile
◆ ◆ ◆ pmddir/pmdfile
◆ ◆ ◆ 12 ◆ ◆ 8 IO ◆ ◆ 4096 ◆ ◆ ◆ ◆
◆ ◆ ◆ 803h/2051d Inode◆ 535071 ◆ ◆ ◆ ◆ 1
◆ ◆ ◆ (0664/-rw-rw-r--) Uid◆ ( 1000/ seven) Gid◆ ( 1000/ seven)
◆ ◆ ◆ ◆ ◆ 2022-09-08 19:14:24.783618567 +0800
◆ ◆ ◆ ◆ ◆ 2022-09-08 19:13:01.189766308 +0800
◆ ◆ ◆ ◆ ◆ 2022-09-08 19:13:01.189766308 +0800
◆ ◆ ◆ ◆ ◆ 2022-09-08 19:13:01.189766308 +0800
seven@seven-virtual-machine:~$
```

11. 使用 ln 命令创建链接

```
seven@seven-virtual-machine:~$ ln pmddir/pmdfile pmddir/pmdfile_h
seven@seven-virtual-machine:~$ ln -s pmddir/pmdfile pmddir/pmdfile_s
seven@seven-virtual-machine:~$ ls -l pmddir
lrwxrwxrwx 1 seven seven 14 19:21 pmddir/pmdfile_s -> pmddir/pmdfile
```

12. 使用 find 命令查找文件

```
seven@seven-virtual-machine:~$ find -name 'pmd*'
./pmddir3
./pmddir2
./pmddir
./pmddir/pmdfile_h
./pmddir/pmdfile_s
./pmddir/pmdfile
seven@seven-virtual-machine:~$ find -name 'pmd???'
./pmddir
seven@seven-virtual-machine:~$ find -name 'pmd????'
./pmddir3
./pmddir2
./pmddir/pmdfile
seven@seven-virtual-machine:~$ _
```

13. 使用 diff 命令比较文件

```
seven@seven-virtual-machine:~$ cd pmddir2
seven@seven-virtual-machine:~/pmddir2$ echo -e "111\n222\n333\n444" >f1
seven@seven-virtual-machine:~/pmddir2$ cat f1
111
222
333
444
seven@seven-virtual-machine:~/pmddir2$ echo -e "111\n222\naaa\n444" >f2
seven@seven-virtual-machine:~/pmddir2$ cd ..
seven@seven-virtual-machine:~$ cat pmddir2/f1
111
222
333
444
seven@seven-virtual-machine:~$ cat pmddir2/f2
111
222
aaa
444
seven@seven-virtual-machine:~$ diff pmddir2/f1 pmddir2/f2
3c3
< 333
---
> aaa
seven@seven-virtual-machine:~$ _
```

14. 使用 tar 命令压缩文件

```
seven@seven-virtual-machine:~$ tar -czvf pmdir.tar.gz pmdir
pmdir/
pmdir/pmdfile_h
pmdir/pmdfile_s
pmdir/pmdfile
seven@seven-virtual-machine:~$ ls -l
# # # 48
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxr-xr-x 2 seven seven 4096 8# 30 13:34 # # #
drwxrwxr-x 2 seven seven 4096 9# 8 19:21 pmdir
drwxrwxr-x 2 seven seven 4096 9# 8 19:30 pmdir2
drwxrwxr-x 2 seven seven 4096 9# 8 19:19 pmdir3
-rw-rw-r-- 1 seven seven 219 9# 8 19:32 pmdir.tar.gz
seven@seven-virtual-machine:~$
```

15. 使用 du 命令查看磁盘空间使用情况

```
8      ../cache/vmware/drag_and_drop
12     ../cache/vmware
4      ../cache/evolution/mail/trash
8      ../cache/evolution/mail
4      ../cache/evolution/memos/trash
8      ../cache/evolution/memos
4      ../cache/evolution/calendar/trash
8      ../cache/evolution/calendar
4      ../cache/evolution/sources/trash
8      ../cache/evolution/sources
4      ../cache/evolution/tasks/trash
8      ../cache/evolution/tasks
4      ../cache/evolution/addressbook/trash
8      ../cache/evolution/addressbook
52     ../cache/evolution
4      ../cache/gnome-control-center/wacom
8      ../cache/gnome-control-center
12     ../cache/update-manager-core
8      ../cache/ubuntu-report
472    ../cache/thumbnails/large
8      ../cache/thumbnails/fail/gnome-thumbnail-factory
12     ../cache/thumbnails/fail
488    ../cache/thumbnails
388    ../cache/gstreamer-1.0
4      ../cache/ibus-table
28     ../cache/ibus/libpinyin
192    ../cache/ibus/bus
224    ../cache/ibus
18180  ../cache
4      ../# #
4      ../# #
12     ../pmdir2
8      ../pmdir
4      ../# #
4      ../# #
19116  .
seven@seven-virtual-machine:~$
```

16. 使用 df 命令查看磁盘空间占用情况

```

seven@seven-virtual-machine:~$ df

```

	1K-blocks	Used	Available	Use%	Mounted on
tmpfs	398328	1824	396504	1%	/run
/dev/sda3	19946096	10506896	8400660	56%	/
tmpfs	1991624	0	1991624	0%	/dev/shm
tmpfs	5120	4	5116	1%	/run/lock
/dev/sda2	524252	5364	518888	2%	/boot/efi
tmpfs	398324	108	398216	1%	/run/user/1000
/dev/sr0	3737140	3737140	0	100%	/media/seven/Ubuntu 22.04.1 LTS amd64

```

seven@seven-virtual-machine:~$

```

17. 使用 fdisk 列出分区

```

Disk /dev/sda 20 GiB 21474836480 1943040
Disk model: VMware Virtual S
  1 * 512 = 512
  ( / ) 512 / 512
I/O ( / ) 512 / 512
  gpt
  2F287BE9-9EED-44ED-99E8-D84B7CB771E6

/dev/sda1      2048      4095      2048      1M BIOS
/dev/sda2      4096   1054719   1050624   513M EFI
/dev/sda3   1054720 41940991 40886272  19.5G Linux

Disk /dev/loop8 61.96 MiB 64966656 126888
  1 * 512 = 512
  ( / ) 512 / 512
I/O ( / ) 512 / 512

Disk /dev/loop9 45.93 MiB 48156672 94056
  1 * 512 = 512
  ( / ) 512 / 512
I/O ( / ) 512 / 512

Disk /dev/loop10 176.88 MiB 185466880 362240
  1 * 512 = 512
  ( / ) 512 / 512
I/O ( / ) 512 / 512

Disk /dev/loop11 346.3 MiB 363118592 709216
  1 * 512 = 512
  ( / ) 512 / 512
I/O ( / ) 512 / 512
root@seven-virtual-machine:/home/seven#

```

18. 使用 mount、umount 命令挂载、卸载磁盘


```

seven@seven-virtual-machine:/$ sudo su
root@seven-virtual-machine:/# mkdir /mnt/usb
root@seven-virtual-machine:/# mount /dev/sdb1 /mnt/usb
root@seven-virtual-machine:/# ls -l /mnt/usb
♦ ♦ ♦ 2826547
drwxrwxrwx 1 root root      4096 6♦ 24 2016 '$GetCurrent'
drwxrwxrwx 1 root root      4096 8♦ 7 22:01 '$Recycle.Bin'
drwxrwxrwx 1 root root      4096 6♦ 24 2016 '$WINDOWS.~BT'
-rwxrwxrwx 1 root root        24 6♦ 11 2009 'autoexec.bat'
drwxrwxrwx 1 root root      8192 6♦ 24 2016 'Boot'
-rwxrwxrwx 1 root root    400228 10♦ 30 2015 'bootmgr'
-rwxrwxrwx 1 root root        1 10♦ 30 2015 'BOOTNXT'
-rwxrwxrwx 1 root root      8192 6♦ 24 2016 'BOOTSECT.BAK'
-rwxrwxrwx 1 root root        10 6♦ 11 2009 'config.sys'
-rwxrwxrwx 2 root root       282 5♦ 14 2014 'desktop (2).ini'
-rwxrwxrwx 1 root root       282 7♦ 25 2011 'desktop.ini'
-rwxrwxrwx 1 root root         0 3♦ 15 2016 'IO.SYS'
-rwxrwxrwx 1 root root         0 3♦ 15 2016 'MSDOS.SYS'
-rwxrwxrwx 1 root root 2893651968 6♦ 24 2016 'pagefile.sys'
drwxrwxrwx 1 root root     12288 6♦ 24 2016 'ProgramData'
drwxrwxrwx 1 root root     20480 10♦ 15 2020 'Program Files'
-rwxrwxrwx 1 root root    229339 5♦ 31 2012 'PSUVD'
drwxrwxrwx 1 root root         0 5♦ 31 2012 'RECYCLER'
drwxrwxrwx 1 root root      4096 6♦ 25 2016 'System Volume Information'
drwxrwxrwx 1 root root     32768 6♦ 5 17:53 'Windows'
root@seven-virtual-machine:/# umount /mnt/usb
root@seven-virtual-machine:/# ls -l /mnt/usb
♦ ♦ ♦ 0
root@seven-virtual-machine:/#

```