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2KE20CS032

Assignment 3

TASK 1

1.Create few folders "testfolder1","testfolder2" in your home directory & list the folders that u have created

```
C:\Users\resq>ssh root@192.168.56.101
root@192.168.56.101's password:
Last login: Mon May 15 17:05:06 2023
[root@localhost ~]# ls
anaconda-ks.cfg  original-ks.cfg  test.txt
[root@localhost ~]# mkdir testfolder1 testfolder2
[root@localhost ~]# ls
anaconda-ks.cfg  original-ks.cfg  testfolder1  testfolder2  test.txt
```

2.Create few files in testfolder1 named "file1.txt","file2.txt","file3.txt"

```
[root@localhost ~]# cd testfolder1
[root@localhost testfolder1]# touch file1.txt file2.txt file3.txt
[root@localhost testfolder1]# ls -l
total 0
-rw-r--r--. 1 root root 0 May 15 17:09 file1.txt
-rw-r--r--. 1 root root 0 May 15 17:09 file2.txt
-rw-r--r--. 1 root root 0 May 15 17:09 file3.txt
```

3.Copy "file1.txt" and "file2.txt" from testfolder1 to testfolder2

```
[root@localhost ~]# cd testfolder2
[root@localhost testfolder2]# pwd
/root/testfolder2
[root@localhost testfolder2]# cd -
/root
[root@localhost ~]# cd testfolder1
[root@localhost testfolder1]# ls -l
total 0
-rw-r--r--. 1 root root 0 May 15 17:09 file1.txt
-rw-r--r--. 1 root root 0 May 15 17:09 file2.txt
-rw-r--r--. 1 root root 0 May 15 17:09 file3.txt
[root@localhost testfolder1]# cp file1.txt file2.txt /root/testfolder2
```

```
[root@localhost ~]# cd testfolder2
[root@localhost testfolder2]# ls -l
total 0
-rw-r--r--. 1 root root 0 May 15 17:16 file1.txt
-rw-r--r--. 1 root root 0 May 15 17:16 file2.txt
```

4.Create a softlink for “file3.txt” in testfolder2.

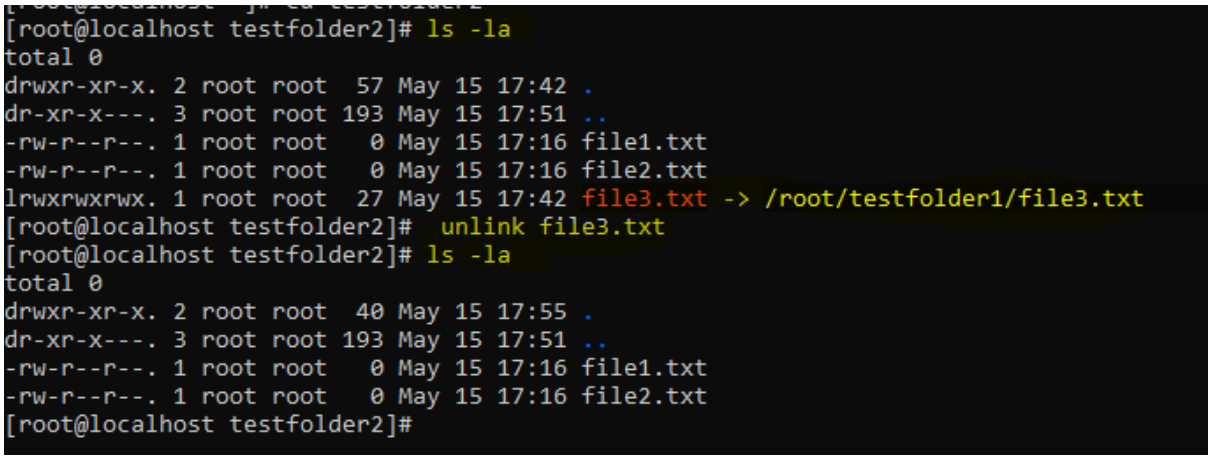
```
[root@localhost ~]# ln -s  /root/testfolder1/file3.txt  /root/testfolder2
[root@localhost ~]# stat /root/testfolder2
  File: ‘/root/testfolder2’
  Size: 57              Blocks: 0          IO Block: 4096   directory
Device: 801h/2049d      Inode: 101322872   Links: 2
Access: (0755/drwxr-xr-x)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2023-05-15 17:17:15.781780324 +0000
Modify: 2023-05-15 17:42:17.164043274 +0000
Change: 2023-05-15 17:42:17.164043274 +0000
 Birth: -
[root@localhost ~]# stat /root/testfolder1/file3.txt
  File: ‘/root/testfolder1/file3.txt’
  Size: 0               Blocks: 0          IO Block: 4096   regular empty file
Device: 801h/2049d      Inode: 67151050    Links: 1
Access: (0644/-rw-r--r--)  Uid: (    0/    root)   Gid: (    0/    root)
Context: unconfined_u:object_r:admin_home_t:s0
Access: 2023-05-15 17:09:51.017630397 +0000
Modify: 2023-05-15 17:09:51.017630397 +0000
Change: 2023-05-15 17:09:51.017630397 +0000
```

```
[root@localhost ~]# cd testfolder2
[root@localhost testfolder2]# ls -la
total 0
drwxr-xr-x. 2 root root  57 May 15 17:42 .
dr-xr-x---. 4 root root 212 May 15 17:06 ..
-rw-r--r--. 1 root root   0 May 15 17:16 file1.txt
-rw-r--r--. 1 root root   0 May 15 17:16 file2.txt
lrwxrwxrwx. 1 root root  27 May 15 17:42 file3.txt -> /root/testfolder1/file3.txt
```

5.Delete “testfolder1” along with the files inside.

```
[root@localhost testfolder1]# rm file1.txt file2.txt file3.txt
rm: remove regular empty file ‘file1.txt’?
rm: remove regular empty file ‘file2.txt’? y
rm: remove regular empty file ‘file3.txt’?
[root@localhost testfolder1]# ls -a
.  ..  file1.txt  file3.txt
[root@localhost testfolder1]# ls
file1.txt  file3.txt
[root@localhost testfolder1]# rm file1.txt
rm: remove regular empty file ‘file1.txt’? yes
[root@localhost testfolder1]# rm file1.txt file2.txt file3.txt
rm: cannot remove ‘file1.txt’: No such file or directory
rm: cannot remove ‘file2.txt’: No such file or directory
rm: remove regular empty file ‘file3.txt’? yes
[root@localhost testfolder1]# ls
[root@localhost testfolder1]# cd -
/root
[root@localhost ~]# rmdir testfolder1
[root@localhost ~]# ls -a
.   anaconda-ks.cfg  .bash_logout   .bashrc  original-ks.cfg  testfolder2
..  .bash_history    .bash_profile  .cshrc   .tcshrc          test.txt
```

6.Find the dangling soft link and delete.

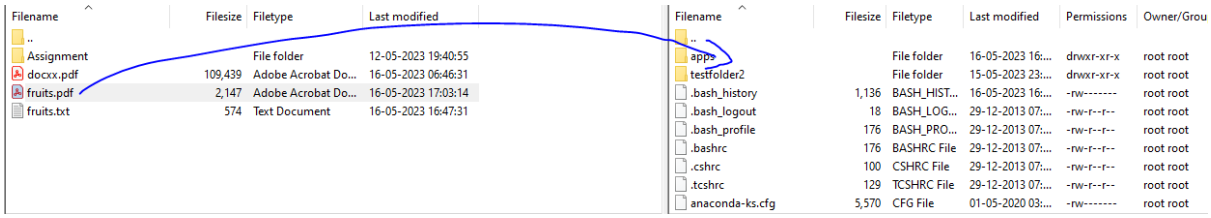


TASK 2

7.Create nested directories ”/root/apps/app1/bin” using single mkdir command.

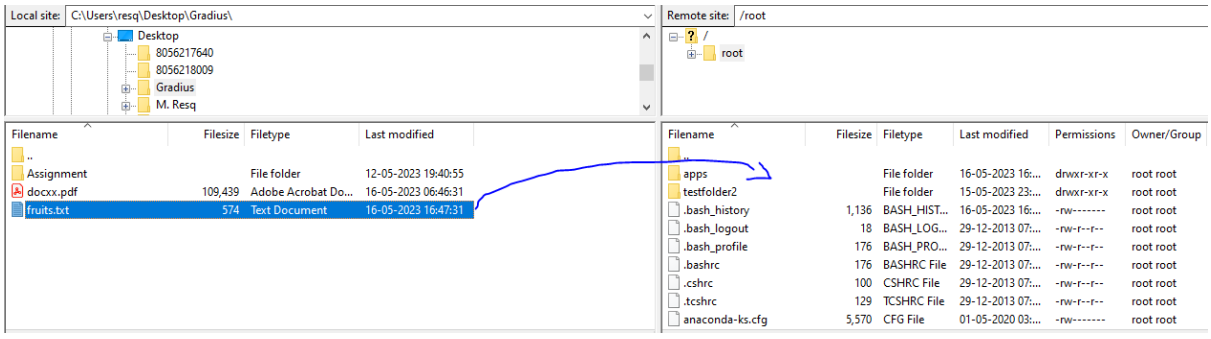
```
[root@localhost ~]# ls
anaconda-ks.cfg  original-ks.cfg  testfolder2  test.txt
[root@localhost ~]# mkdir /root/apps/app1/bin
mkdir: cannot create directory ‘/root/apps/app1/bin’: No such file or directory
[root@localhost ~]# mkdir -p /root/apps/app1/bin
[root@localhost ~]# ls -l
total 20
-rw-------. 1 root root 5570 Apr 30  2020 anaconda-ks.cfg
drwxr-xr-x. 3 root root   18 May 16 11:08 apps
-rw-------. 1 root root 5300 Apr 30  2020 original-ks.cfg
drwxr-xr-x. 2 root root   40 May 15 17:55 testfolder2
-rw-r--r--. 1 root root   31 May 12 10:00 test.txt
```

8.Create a file named fruits.txt inside ”/root/apps/app1/bin” and copy the contents attached in the pdf.



Disclaimer: after transferring pdf its contents are not showing properly.

Thus, I asked permission of sir and converted in to txt document and transferred using file zilla application software.



And copied

```
[root@localhost ~]# ls
anaconda-ks.cfg  apps  fruits.pdf  fruits.txt  original-ks.cfg  testfolder2  test.txt
[root@localhost ~]# cp fruits.txt  /root/apps/app1/bin
[root@localhost ~]# cd  /root/apps/app1/bin
[root@localhost bin]# ls -a
.  ..  fruits.txt
```

9.Display the contents in the “fruits.txt” using more command.

```
[root@localhost bin]# more fruits.txt
Apple
Apricot
Avocados
Banana
Blueberry
BellFruit/RoseApple
Custardapple
Currant
Coconut
Cashewfruit
Cherry
Cranberry
Durian
Datefruit
Dragonfruit
Elderberry
Fig
Guava
Grapes
Gooseberry
Hackberry
Jackfruit
Jambool
Jujube
Kiwi
Kokum/Mangosteen
Lemon/LimeLychee
Longan
Melon/Cucumber
Mangofruit
MulberryOrange
PineApple
Peach
Pomegranate
Palmfruit
Pear
Plum
Papaya
```

10.Display the contents in the“fruits.txt” using less command.

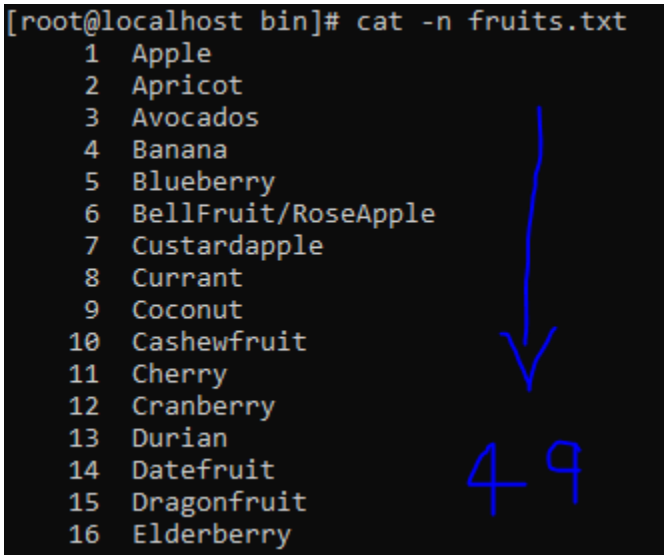
```
[root@localhost bin]# less fruits.txt
[root@localhost bin]#
```

Note: after using less command the content displayed and after we need to press “q” to quit.

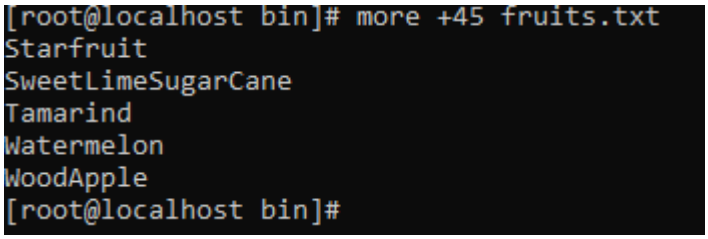
```
Apple
Apricot
Avocados
Banana
Blueberry
BellFruit/RoseApple
Custardapple
Currant
Coconut
Cashewfruit
Cherry
Cranberry
Durian
Datefruit
Dragonfruit
Elderberry
Fig
Guava
Grapes
Gooseberry
Hackberry
Jackfruit
Jambool
Jujube
Kiwi
Kokum/Mangosteen
Lemon/LimeLychee
Longan
Melon/Cucumber
Mangofruit
MulberryOrange
PineApple
Peach
Pomegranate
Palmfruit
Pear
Plum
Papaya
Pithecellobiumdulce
Passion
Raspberries
Rambutan
Strawberry
fruits.txt
```

11.Display the last 5 lines in the“fruits.txt”.

Note: to how the how many lines we can use scripting language but I have used “cat -n filename” where -n represents number of lines present in the fruits.txt file.



Then I subtracted the total number of lies and printed the required line where (+45 indicates including 45th line to last line print it.)



TASK 3

12.Create a hidden file using touch command(ex:touch.hidden.txt).

Creating the hidden file

```
[root@localhost bin]# touch .test_hidden.txt
[root@localhost bin]# ls -l
total 4
-rw-r--r--. 1 root root 574 May 16 11:52 fruits.txt
```

13.Display the hidden file using “ls-a”command

```
[root@localhost bin]# ls -a
.  ..  fruits.txt  .test_hidden.txt
```

14.Display the current working Directory (you need to find out the command).

```
[root@localhost bin]# pwd
/root/apps/app1/bin
```

15.Display your ip address using grep command.

Thus to your ip address using grep command we can use scripting language but as far I use piplng concept that is I transfer one out put of command to another and search in that file using grep command which helps to find the patters in file.

Type 1

```
[root@localhost ~]# ip a > my_ip_addrss
[root@localhost ~]# grep -i  "inet" my_ip_addrss
    inet 127.0.0.1/8 scope host lo
    inet6 ::1/128 scope host
    inet 192.168.56.101/24 brd 192.168.56.255 scope global noprefixroute dynamic eth0
    inet6 fe80::5054:ff:fe4d:77d3/64 scope link
[root@localhost ~]#
```

Type 2

```
[root@localhost ~]# grep -i  "192*" my_ip_addrss
    inet 192.168.56.101/24 brd 192.168.56.255 scope global noprefixroute dynamic eth0
[root@localhost ~]#
```