

Name:Akshay chinnu

Sec: A

Roll number:422141

Assignment:6

Question:

Write shell script for

commands :

bc,comm,chown,chgrp,cron,dd,diff,finger,find,ftp,lock,ln,lp,lpstat,mesg .

1) bc

Code:

```
> bc.sh
sh > No Selection
x=`echo "12+5" | bc `
echo $x
echo "var=10;var" | bc
echo "var=10;++var" | bc
echo "10>5" | bc
pi=`echo "h=10;4*a(1)" | bc -l`
echo $pi
echo "c($pi/3)" | bc -l
echo 'n=8;m=10;if(n>m) print "n is greater" else print "m is greater" ' | bc -l
echo "for(i=1;i<=10;i++) {i;} | bc"
```

Output:

```
< > bc.sh
sh ) No Selection

Akshay@Akshay-VirtualBox:~$ cd Desktop
Akshay@Akshay-VirtualBox:~/Desktop$ cd assignment
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ chmod +x bc.sh
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash bc.sh
bash: bc.sh: Permission denied
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash bc.sh
19
12
16
6
bc.sh: line 6: 5.2456776535879323844: command not found

(standard_in) 1: syntax error
m is greaterfor (i=1;i<=10;i++) {i;} | bc
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bc -q bctest.txt
8
29
29
```

2) comm

code:

```
> comm.sh
m.sh ) No Selection

comm f1.txt f2.txt
comm -1 f1.txt f2.txt
comm --check-order f1.txt f2.txt
comm --nocheck-order f1.txt f2.txt
```

output:

```
< > comm.sh
nm.sh ) No Selection
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash comm.sh
sumanth newton
comm: f2 is not in sorted order
tarun
Akshay
comm: f1 is not in sorted order sushanth tarun
comm: input is not in sorted order sumanth newton
comm: f2 is not in sorted order tarun
comm: f1 is not in sorted order comm: input is not in sorted order
sumanth newton
comm: f2 is not in sorted order
sumanth newton tarun
Akshay sushanth tarun
```

f1.txt: f2.txt:

Akshay sumanth

sushanth newton

tarun tarun

3) chown

code:

```
< > chown.sh
wn.sh ↕ No Selection
chown -c Akshay f1.txt
ls -l f1.txt
chown -v Akshay f2.txt
ls -l f2.txt
chown -f Akshay comm.sh
```

OUTPUT:

```
< > chown.sh
wn.sh ) No Selection
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ chmod +x chown.sh
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash chown.sh
-rw-rw-r-- 1 Akshay Akshay 28 Mar 30 20:19 f1.txt
ownership of 'f2.txt' retained as Akshay
-rw-rw-r-- 1 Akshay Akshay 28 Mar 29 38:11 f2.txt
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ |
```

4) chgrp

code:

```
> chgrp.sh  
rp.sh > No Selection  
chown :group1 f1.txt  
chown Akshay:group1 cron.sh  
chown --from=:group1 group2 cron.sh  
chown --references=f1.txt bctest.sh  
chgrp group1 f1.txt  
chgrp -R group1 example  
chgrp -c group1 f2.txt  
chgrp -f group2 f2.txt  
chgrp -v group3 f2.txt
```

output:

```

chgrp.sh } No Selection
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash chgrp.sh

chown: changing group of 'f1.txt': Operation not permitted

chown: invalid user: 'group2': operation not permitted
chown: unrecognized option
'--references=f1.txt'
Try 'chown --help' for more information.

chgrp: changing group of 'f1.txt': Operation not permitted
chgrp: changing group of 'example': Operation not permitted
chgrp: changing group of 'f2.txt': Operation not permitted
chgrp: changing group of 'f2.txt': Operation not permitted
failed to change group of 'f2.txt' from Akshay to group3

Akshay@Akshay-VirtualBox:~/Desktop/assignment$ sudo bash chgrp.sh
chown: invalid user: 'group2'

chown: unrecognized option
'--references=f1.txt'
Try 'chown --help' for more information.

changed group of 'f2.txt' from Akshay to group1
changed group of 'f2.txt' from group2 to group3

Akshay@Akshay-VirtualBox:~/Desktop/assignment$

```

5) cron

code:

```

Akshay@Akshay-VirtualBox:~/Desktop/assignment$ crontab -e
no crontab for Akshay - using an empty one
Select an editor. To change later, run 'select-editor'.
1. /bin/nano
--- easiest
2. /usr/bin/vim.tiny
3. /bin/ed
Choose 1-3 [1]: 1
crontab: installing new crontab
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ crontab -e
No modification made
Akshay@Akshay-VirtualBox:~/Desktop/assignment$

```

output:

```
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# and day of week (dow) or use '*' in these fields (for
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
For example, you can run a backup of all your user accounts
#
at 5 a.m every week with:
#05 * * 1 tar -zcf /var/backups/home.tgz /home/
# For more information see the manual pages of crontab(5) and cron(8)
#
#m h
dom mon dow
command
00 09 * * * /Akshay/Desktop/assignment/bc.sh
```

6) dd

code and output:

```
> dd.sh
sh ) No Selection

dd if=/dev/sda of=/dev/sdb
dd if=/dev/sda of=/dev/sdb conv=noerror, sync
dd if=/dev/hda1 of=~ /partition.img
dd if=/dev/hda of=~ /hdadisk.img
dd if=hdadisk.img of=/dev/hdb
dd if=/dev/cdrom of=tgsservice.iso bs=2048
```

7) diff

code:

```
> diff.sh
sh ) No Selection
diff f1.txt f2.txt
diff -c f1.txt f2.txt
diff -u f1.txt f2.txt
diff -i f1.txt f2.txt
```

output:

```
< > diff.sh
f.sh ) No Selection
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ chmod +x diff.sh
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash diff.sh
1,2c1,2
< Akshay
< sushanth
- --
> sumanth
> newton
*** f1.txt
--- f2.txt
2024-03-31 23:01:09.121509250 +0530
2024-03-31 23:01:30.041877280 +0530
*****
*** 1,3 **** ! Akshay ! sushanth tarun
--- 1,3 ---- ! sumanth ! newton tarun
--- f1.txt
+++ f2.txt
2024-03-31 23:01:09.121509250 +0530
2024-03-31 23:01:30.041877280 +0530
@@ -1,3 +1,3 @@
- Akshay
- sushanth +sumanth +newton tarun
1,2c1,2
< Akshay < sushanth
- - -
> sumanth
> newton
Akshay@Akshay-VirtualBox:~/Desktop/assignment$
```

7)finger

code and output:

```
< > finger.sh
ger.sh } No Selection

finger Akshay
echo "Plan details" > ~/.plan
finger -s Akshay
finger -p Akshay
echo "Project details" > ~/.project
```

```
> x finger.sh
er.sh } No Selection

Akshay@Akshay-VirtualBox:~$ cd Desktop
Akshay@Akshay-VirtualBox:~/Desktop/assignment$
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ bash finger.sh
finger: /dev//seat0: No such file or directory
Login: Akshay
Name: Akshay
Directory: /Akshay
Shell: /bin/bash
On since Sun Mar 29 13:21 (IST) on seat0 from login screen
On since Sun Mar 29 13:51 (IST) on tty2 from tty2
1 hours 10 minutes idle
No mail.
Project:
Project details
Plan:
Plan details
finger: /dev//seat0: No such file or directory
Login
Name
Tty
Idle Login Time
Office
Office Phone
Akshay Akshay
seat0
Mar 29 13:21 (login screen)
Akshay Akshay
tty2
2:16 Mar 29 13:21 (tty2)
finger: /dev//seat0: No such file or directory
Login: Akshay
Name: Akshay
Directory: /Akshay
Shell: /bin/bash
On since Sun Mar 31 22:21 (IST) on seat0 from login screen
On since Sun Mar 31 22:21 (IST) on tty2 from tty2
1 hours 10 minutes idle
No mail.
Akshay@Akshay-VirtualBox:~/Desktop/assignment$ cd
Akshay@Akshay-VirtualBox:~$ echo "project details" > ~/.project
Akshay@Akshay-VirtualBox:~$ finger Akshay finger: /dev//seat0: No such file or directory
Login: Akshay
Name: Akshay
Directory: /Akshay
Shell: /bin/bash
On since Sun Mar 29 13:21 (IST) on seat0 from login screen
On since Sun Mar 29 13:51 (IST) on tty2 from tty2
```




8) lp
code:



9) ipstat:

code:

code:



10) mesg

code and output:



11) In
code and output:



