UNIX LAB ASSIGNMENT

NAME: VEERAJA V

ROLL NO: 422180

Q) Write shell script for commands : bc,comm,chown,chgrp,cron,dd,diff,finger,find,ftp,lock

```
(base) veeraja@veeraja-VirtualBox:~$ cd Desktop
(base) veeraja@veeraja-VirtualBox:~/Desktop$ git clone https://github.com/Veeraja-Veeraesh/UNIX_LAB.git
Cloning into 'UNIX_LAB'...
warning: You appear to have cloned an empty repository.
(base) veeraja@veeraja-VirtualBox:~/Desktop$ cd UNIX_LAB/
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git status
On branch main

No commits yet

nothing to commit (create/copy files and use "git add" to track)
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git checkout -b branch_2
Switched to a new branch 'branch_2'
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git branch
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git status
On branch branch_2

No commits yet

nothing to commit (create/copy files and use "git add" to track)
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ mkdir 422180_Lab
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git status
On branch branch_2

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        422180_Lab/

nothing added to commit but untracked files present (use "git add" to track)
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git add .
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git commit -m "Uploaded Unix Lab Assignments of 422180"
[branch_2 (root-commit) d4250a7] Uploaded Unix Lab Assignments of 422180
 42 files changed, 955 insertions(+)
 create mode 100644 422180_Lab/cities.txt
 create mode 100644 422180_Lab/day-temp.txt
 create mode 100644 422180_Lab/forgrep.txt
 create mode 100644 422180_Lab/foruniq.txt
 create mode 100755 422180_Lab/grepscript.sh
 create mode 100644 422180_Lab/months.txt
 create mode 100644 422180_Lab/numbers.txt
 create mode 100755 422180_Lab/week4/awk_command.sh
 create mode 100644 422180_Lab/week4/awk_command.txt
 create mode 100644 422180_Lab/week4/awk_outputs.txt
 create mode 100644 422180_Lab/week4/cpio_archive.cpio
 create mode 100755 422180_Lab/week4/cpio_command.sh
 create mode 100755 422180_Lab/week4/cpio_command.txt
 create mode 100644 422180_Lab/week4/cpio_output.txt
 create mode 100644 422180_Lab/week4/file1.txt
 create mode 100755 422180_Lab/week4/sed_command.sh
 create mode 100755 422180_Lab/week4/sed_command.txt
 create mode 100644 422180_Lab/week4/sed_output.txt
 create mode 100755 422180_Lab/week4/tar_command.sh
 create mode 100755 422180_Lab/week4/tar_command.txt
 create mode 100644 422180_Lab/week4/tar_output.txt
 create mode 100644 422180_Lab/week4/week4_folder1/file1.txt
 create mode 100644 422180_Lab/week4/week_4_folder1.tar.gz
 create mode 100644 422180_Lab/week4/week_4_folder1_extracted/week4_folder1/file1.txt
 create mode 100644 422180_Lab/week4/week_4_folder1_extracted/week4_folder1/file2.txt
 create mode 100755 422180_Lab/week5/eg_dynamic.so
 create mode 100644 422180_Lab/week5/eg_static.a
 create mode 100644 422180_Lab/week5/fact.c
 create mode 100644 422180_Lab/week5/fact_obj.o
 create mode 100644 422180_Lab/week5/head.h
 create mode 100644 422180_Lab/week5/main.c
 create mode 100644 422180_Lab/week5/main_obj.o
 create mode 100755 422180_Lab/week5/main_res_dyn
 create mode 100755 422180_Lab/week5/main_result
 create mode 100644 422180_Lab/week5/sum.c
 create mode 100644 422180_Lab/week5/sum_obj.o
 create mode 100755 422180_Lab/week6/a.out
 create mode 100644 422180_Lab/week6/gdb_prog2.c
 create mode 100644 422180_Lab/week6/seg1_string.c
 create mode 100755 422180_Lab/week6/seg1out
 create mode 100755 422180_Lab/week6/seg1out2
 create mode 100644 422180_Lab/week9.txt
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git remote -v
origin  https://github.com/Veeraja-Veeraesh/UNIX_LAB.git (fetch)
origin  https://github.com/Veeraja-Veeraesh/UNIX_LAB.git (push)
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git remote set-url origin https://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@github.com/Veeraja-Veeraesh/
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git push origin branch_2
remote: Permission to Veeraja-Veeraesh/UNIX_LAB.git denied to Veeraja-Veeraesh.
fatal: unable to access 'https://github.com/Veeraja-Veeraesh/UNIX_LAB.git/': The requested URL returned error: 403
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ ^C
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git remote set-url origin https://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@github.com/Veeraja-Veeraesh/
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git remote -v
origin  https://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@github.com/Veeraja-Veeraesh/UNIX_LAB.git/ (fetch)
origin  https://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@github.com/Veeraja-Veeraesh/UNIX_LAB.git/ (push)
(base) veeraja@veeraja-VirtualBox:~/Desktop/UNIX_LAB$ git push origin branch_2
Enumerating objects: 46, done.
Counting objects: 100% (46/46), done.
Delta compression using up to 3 threads
Compressing objects: 100% (39/39), done.
Writing objects: 100% (46/46), 27.00 KiB | 1.23 MiB/s, done.
Total 46 (delta 9), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (9/9), done.
To https://github.com/Veeraja-Veeraesh/UNIX_LAB.git/
 * [new branch]      branch_2 -> branch_2
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm forcomm1.txt forcomm2.txt
                Delhi
comm: file 2 is not in sorted order
                Bangalore
                Chennai
                Mumbai
                Kochi
Pune
comm: file 1 is not in sorted order
Kolkata
Gandhinagar
Delhi
Bangalore


                Vizag
                Pune
                Kolkata
                Jaipur
                Chandigarh
                Lucknow
                Gandhinagar
comm: input is not in sorted order
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sort forcomm1.txt | cat sortedforcomm1.txt
cat: sortedforcomm1.txt: No such file or directory
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sort forcomm1.txt | cat > sortedforcomm1.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sort forcomm2.txt | cat > sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm sortedforcomm1.txt sortedforcomm2.txt


                        Bangalore
                Chandigarh
                Chennai
                        Delhi
                        Gandhinagar
                Jaipur
                Kochi
                        Kolkata
                Lucknow
                Mumbai
                        Pune
                Vizag
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ cat sortedforcomm1.txt


Bangalore
Delhi
Gandhinagar
Kolkata
Pune
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ cat sortedforcomm2.txt
Bangalore
Chandigarh
Chennai
Delhi
Gandhinagar
Jaipur
Kochi
Kolkata
Lucknow
Mumbai
Pune
Vizag
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -1 sortedforcomm1.txt sortedforcomm2.txt
        Bangalore
Chandigarh
Chennai
        Delhi
        Gandhinagar
Jaipur
Kochi
        Kolkata
Lucknow
Mumbai
        Pune
Vizag
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -2 sortedforcomm1.txt sortedforcomm2.txt


        Bangalore
        Delhi
        Gandhinagar
        Kolkata
        Pune
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -3 sortedforcomm1.txt sortedforcomm2.txt


        Chandigarh
        Chennai
        Jaipur
        Kochi
        Lucknow
        Mumbai
        Vizag
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -23 sortedforcomm1.txt sortedforcomm2.txt


(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -13 sortedforcomm1.txt sortedforcomm2.txt
Chandigarh
Chennai
Jaipur
Kochi
Lucknow
Mumbai
Vizag
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -12 sortedforcomm1.txt sortedforcomm2.txt
Bangalore
Delhi
Gandhinagar
Kolkata
Pune
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ comm -12 --total sortedforcomm1.txt sortedforcomm2
Bangalore
Delhi
Gandhinagar
Kolkata
Pune
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 16
-rw-rw-r-- 1 user2    veeraja 43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja 43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo chown -c -v veeraja forcomm1.txt
changed ownership of 'forcomm1.txt' from user2 to veeraja
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 16
-rw-rw-r-- 1 veeraja veeraja 43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja 43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ getent passwd 1001
user2:x:1001:1001:User2,,,:/home/user2:/bin/bash
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo chown -c user2 forcomm1.txt
changed ownership of 'forcomm1.txt' from veeraja to user2
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 16
-rw-rw-r-- 1 user2    veeraja 43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja 43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo addgroup group1_unix
Adding group `group1_unix' (GID 1002) ...
Done.
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 16
-rw-rw-r-- 1 user2    veeraja 43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja 43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja 94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo chgrp group1_unix forcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 16
-rw-rw-r-- 1 user2    veeraja     43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja group1_unix 94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja     43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja     94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo chgrp -c veeraja forcomm2.txt
changed group of 'forcomm2.txt' from group1_unix to veeraja
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ mkdir forchgrp
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ cd forchgrp
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6/forchgrp$ touch file1.txt && touch file2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6/forchgrp$ cd ..
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls -l
total 20
drwxrwxr-x 2 veeraja veeraja 4096 Apr  3 19:43 forchgrp
-rw-rw-r-- 1 user2    veeraja   43 Apr  3 19:20 forcomm1.txt
-rw-rw-r-- 1 veeraja veeraja   94 Feb 14 14:33 forcomm2.txt
-rw-rw-r-- 1 veeraja veeraja   43 Apr  3 19:22 sortedforcomm1.txt
-rw-rw-r-- 1 veeraja veeraja   94 Apr  3 19:22 sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ sudo chgrp -v -R group1_unix forchgrp
changed group of 'forchgrp/file1.txt' from veeraja to group1_unix
changed group of 'forchgrp/file2.txt' from veeraja to group1_unix
changed group of 'forchgrp' from veeraja to group1_unix
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$
```

```
veeraja@veeraja-VirtualBox: ~/Desktop/unix_lab/assignment6

(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ ls
forchgrp  forcomm1.txt  forcomm2.txt  sortedforcomm1.txt  sortedforcomm2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt
0+1 records in
0+1 records out
43 bytes copied, 0.000226564 s, 190 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ cat ddforcomm1.txt
Pune
Kolkata
Gandhinagar
Delhi
Bangalore
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt bs=5b
0+1 records in
0+1 records out
43 bytes copied, 0.000240713 s, 179 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt count=3
0+1 records in
0+1 records out
43 bytes copied, 0.000270271 s, 159 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ head -n 5 ddforcomm1.txt
Pune
Kolkata
Gandhinagar
Delhi
Bangalore
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt conv=ucase
0+1 records in
0+1 records out
43 bytes copied, 0.00343708 s, 12.5 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ head -n 5 ddforcomm1.txt
PUNE
KOLKATA
GANDHINAGAR
DELHI
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt conv=ucase
0+1 records in
0+1 records out
43 bytes copied, 0.00343708 s, 12.5 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ head -n 5 ddforcomm1.txt
PUNE
KOLKATA
GANDHINAGAR
DELHI
BANGALORE
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ dd if=forcomm1.txt of=ddforcomm1.txt conv=ibm
0+1 records in
0+1 records out
43 bytes copied, 0.00102757 s, 41.8 kB/s
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ head -n 5 ddforcomm1.txt
·◇◇%╳◇◇◇◇%║◇◇◇◇◇◇◇◇◇%ą◇◇%◇◇◇◇◇◇◇%%%(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$
```

```
veeraja@veeraja-VirtualBox: ~/Desktop/unix_lab/assignment6

(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ finger user2
Login: user2                          Name: User2
Directory: /home/user2                Shell: /bin/bash
Never logged in.
No mail.
No Plan.
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ finger -s user2
Login       Name       Tty      Idle  Login Time   Office     Office Phone
user2       User2       *        *   No logins
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ finger -l user2
Login: user2                          Name: User2
Directory: /home/user2                Shell: /bin/bash
Never logged in.
No mail.
No Plan.
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ finger -p user2
Login: user2                          Name: User2
Directory: /home/user2                Shell: /bin/bash
Never logged in.
No mail.
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab/assignment6$ cd ..
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -iname "week*"
./week9.txt
./week6
./week4
./week4/week_4_folder1_extracted
./week4/week_4_folder1_extracted/week4_folder1
./week4/week_4_folder1.tar.gz
./week4/week4_folder1
./week5
./week5/week6_422180
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -iname "week*" -type d
./week6
./week4
./week4/week_4_folder1_extracted
./week4/week_4_folder1_extracted/week4_folder1
./week4/week4_folder1
./week5
./week5/week6_422180
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -type l
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find -L -iname "week*"
./week9.txt
./week6
./week4
./week4/week_4_folder1_extracted
./week4/week_4_folder1_extracted/week4_folder1
./week4/week_4_folder1.tar.gz
./week4/week4_folder1
./week5
./week5/week6_422180
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -iname "week*" maxdepth 1
find: paths must precede expression: `maxdepth'
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -iname "week*" -maxdepth 1
find: warning: you have specified the global option -maxdepth after the argument -iname, but global options are not positional, i.e., -maxdepth affects tests specified before it as well as those specified afte
it.  Please specify global options before other arguments.
./week9.txt
./week6
./week4
./week5
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -type f -empty
./assignment6/forchgrp/file1.txt
./assignment6/forchgrp/file2.txt
```

```
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -type f -empty
./assignment6/forchgrp/file1.txt
./assignment6/forchgrp/file2.txt
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -type d ! -newermt 2024-04-03
./week6
./week4
./week4/week_4_folder1_extracted
./week4/week_4_folder1_extracted/week4_folder1
./week4/week4_folder1
./week5
./week5/week6_422180
(base) veeraja@veeraja-VirtualBox:~/Desktop/unix_lab$ find . -user user2
./assignment6/forcomm1.txt
```