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Title (Where required): Unix Command Utility

I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

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Introduction

Debian is a popular and freely available computer operating system (OS) that uses a Unix-like kernel-- typically Linux -- alongside other program components, many of which come from GNU Project. Debian can be downloaded over the internet or, for a small charge, obtained on CD, DVD, Blu-ray disc or USB flash drive. As open source software, Debian is developed by nearly 1,000 active programmers from around the world who collectively form Debian Project (Sheldon, 2022). The coursework id about the basic linux command. The task in the coursework is all about switching through different directories, handling the access permissions of files and directories as well as aliasing, creating, and reading files in the directories.

Aims and objectives

Task A part of the coursework aims on fostering a script that carry out interaction with the UNIX environment in a user-friendly manner executing information and activities.

Whereas the objective of the coursework is to learn to work with UNIX commands and figure out how to foster script in the environment. This task targets fabricating comfort while chipping away at UNIX.

Transcript

Q.No.1. Creating new directory

```
1. Script started on 2022-04-20 19:59:41+05:45 [TERM="xterm-256color"
   TTY="/dev/tty6" COLUMNS="166" LINES="43"]
```

Task 1:

Command: Creating the NBA directory

```
1. /home/punam $ mkdir -p IPL/{"Mumbai Indians",KKR,Punjab,"Rajsthan
   Royals",RCB}
```

Command: Showing directories

```
1. /home/punam $ tree IPL
```

Response:

```
1. IPL
2. ├── KKR
3. ├── {Mumbai\Indians
4. ├── Punjab
5. ├── Rajsthan\Royals
6. └── RCB
```

Q.No.2. Removing Existing Files and directories

Task 2:

Command: Changing path of the directory

```
1. /home/punam $ cd IPL/KKR
```

Command: Showing path of the directory

```
1. /home/punam/IPL/KKR $ pwd
```

Response:

```
1. /home/punam/IPL/KKR
```

Command: Creating two files

```
1. /home/punam/IPL/KKR $ touch file1 file2
```

Task 3:

Command: Changing back directory to IPL

```
1. /home/punam/IPL/KKR $ cd ..
```

Command: Removing Files and Directories

```
1. /home/punam/IPL $ rm -ri KKR
```

Response:

```
1. rm: descend into directory 'KKR'? y
2. rm: remove regular empty file 'KKR/file2'? y
3. rm: remove regular empty file 'KKR/file1'? y
4. rm: remove directory 'KKR'? n
```

Command: Change to the IPL directory

```
1. /home/punam/IPL $ cd KKR
```

Command: Showing absence of the files

```
1. /home/punam/IPL/KKR $ ls -a
```

Response:

```
1.  .  ..
```

Q.No.3. Usage of the echo command

Task 4:

Command: Printing String in one Echo command

```
1.  /home/punam/IPL $ echo -e "Hello! I am big fan of IPL.\n14<(2+2)"
```

Response:

```
1.  Hello! I am big fan of IPL.
2.  14<(2+2)
```

Command: Showing the path of the directory

```
1.  /home/punam/IPL $ pwd
```

Response:

```
1.  /home/punam/IPL
```

Command: Changing to KKR directory

```
1.  /home/punam/IPL $ cd KKR
```

Command: Showing path of current directory

```
1.  /home/punam/IPL/KKR $ pwd
```

Response:

```
1. /home/punam/IPL/KKR
```

Task 5:

Command: Giving group command pwd; cd; pwd

```
1. /home/punam/IPL/KKR $ pwd; cd; pwd
```

Response:

```
1. /home/punam/IPL/KKR
2. /home/punam
```

Explanation:

The pwd command stands for Print Working Directory command which prints the current working that is KKR, cd (change directory) changes the the current working directory into a home directory and pwd command prints the directory.

Task 6:

Command: Changing to KKR directory giving relative pathname

```
1. /home/punam $ cd IPL/KKR
```

Command: Entering group command pwd; cd ..; pwd; cd ..; pwd

```
1. /home/punam/IPL/KKR $ pwd; cd ..; pwd; cd ..; pwd
```

Response:

```
1. /home/punam/IPL/KKR
2. /home/punam/IPL
3. /home/punam
```

Explanation:

The given pwd command prints the working directory and cd .. command changes to KKR and again pwd prints the present working directory. Same goes for other two commands.

Q.No.4. Usage of the ls command

Task 7:

Command: Giving cd; pwd group of commands

```
1. /home/punam $ cd; pwd
```

Response:

```
1. /home/punam
```

Explanation of the code:

cd command changes the directory into the home directory and pwd command prints the working directory.

Command: ls

```
1. /home/punam $ ls
```

Response:

```
1. 20048968cw2p2  cw2p2  fileAY  fileJL  fileKC  IPL
```

Explanation:

The ls command lists all the files

Command: ls -a

```
1. /home/punam $ ls -a
```

Response:

```
1. .                 20048968cw2p2                .bash_logout  fileAY  IPL
2. ..                .20048968PunamThapaMagar.swp  .bashrc      fileJL  .local
3. .20048968cw2p1.swp  .bash_history               cw2p2        fileKC  .profile
```

The ls -a command lists all the files including hidden commands.

Command: ls -al

```
1. /home/punam $ ls -al
```

Response:

```
1. total 48
2. drwxr-xr-x 1 punam punam  512 Apr 20 20:01 .
3. drwxr-xr-x 1 root  root   512 Mar 28 10:42 ..
4. -rw-r--r-- 1 punam punam 1024 Apr 15 10:38 .20048968cw2p1.swp
5. -rw-r--r-- 1 punam punam 2048 Apr 20 20:03 20048968cw2p2
6. -rw-r--r-- 1 punam punam 1024 Apr 12 19:49
   .20048968PunamThapaMagar.swp
7. -rw------- 1 punam punam 8941 Apr 20 18:04 .bash_history
8. -rw-r--r-- 1 punam punam  220 Mar 28 10:42 .bash_logout
9. -rw-r--r-- 1 punam punam 3666 Apr 20 18:32 .bashrc
10. -rw-r--r-- 1 punam punam 7459 Apr 20 11:47 cw2p2
11. -rw-r--r-- 1 punam punam  482 Apr 19 08:43 fileAY
12. -rw-r--r-- 1 punam punam  387 Apr 17 18:37 fileJL
13. -rw-r--r-- 1 punam punam  670 Apr 19 05:33 fileKC
14. drwxr-xr-x 1 punam punam  512 Apr 20 20:01 IPL
15. drwxr-xr-x 1 punam punam  512 Mar 28 11:08 .local
16. -rw-r--r-- 1 punam punam  807 Mar 28 10:42 .profile
```

Explanation:

When the 'ls' command with '-al' option is used the size of the files and directories modifies data and the time owner and permission of both non-hidden and hidden files and directories are display.

Task 8:

Command: group code of cd; pwd; cd cw2; pwd

```
1. /home/punam $ cd; pwd; cd cw2; pwd
```

Response:

```
1. /home/punam
2.  bash: cd: cw2: No such file or directory
3. /home/punam
```

Explanation:

In this command cd take user back to the home directory and pwd prints the working directory. This command cd cw2 changes the directory and gives error message when the user tries to change to non-existence directory and again pwd prints the working directory.

Command: ls -R

```
1. /home/punam $ ls -R
```

Response:

```
.:
20048968cw2p2  cw2p2  fileAY  fileJL  fileKC  IPL

./IPL:
 KKR  'Mumbai Indians'   Punjab  'Rajsthan Royals'   RCB

./IPL/KKR:

'./IPL/Mumbai Indians':

./IPL/Punjab:

'./IPL/Rajsthan Royals':

./IPL/RCB:
```

Explanation:

The command ‘ls’ display the files and the directory of the current working directory of the current working directory but with the option. While ‘-R’ option tells the ‘ls’ command to display the contents of the subdirectories recursively.

Q.No.5. Usage of the cat command

Task 9:

Command: Changing the directory to RCB

```
/home/punam $ cd IPL/RCB
```

Command: Creating three files using the cat utility

File testX

```
/home/punam/IPL/RCB $ cat>testX
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. ^Z
9. [1]+  Stopped                 cat > testX
```

File testY

```
1. /home/punam/IPL/RCB $ cat>testY
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. ^Z
9. [2]+  Stopped                 cat > testY
```

File testZ

```
1. /home/punam/IPL/RCB $ cat>testZ
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. ^Z
9. [3]+  Stopped                 cat > testZ
```

Task 10:

Command: Displaying each file testX testY and testZ using cat utility

Displaying file testX

```
1. /home/punam/IPL/RCB $ cat testX
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
```

Displaying file testY

```
1. /home/punam/IPL/RCB $ cat testY
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
```

Displaying file testZ

```
1. /home/punam/IPL/RCB $ cat testZ
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
```

Task 11:

Command: Copying files testX testY testZ to “Rajsthan Royals” directory typing a relative pathname.

```
1. /home/punam/IPL/RCB $ cp testX testY testZ ../"Rajsthan Royals"
```

Task 12:

Command: cat testX testY testZ

```
1. /home/punam/IPL/RCB $ cat testX testY testZ
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. aaabb Aaaaa
9. AAAAA
10. bbbcc Bbbbb
11. BBBBB
12. ff-ff Ccccc CCCCC
13. cccdd Ddddd
14. DDDDD
15. aaabb Aaaaa
16. AAAAA
17. bbbcc Bbbbb
18. BBBBB
19. ff-ff Ccccc CCCCC
20. cccdd Ddddd
21. DDDDD
```

Command: cat testX testY testZ>testResult

```
1. /home/punam/IPL/RCB $ cat testX testY testZ>testResult
```

Command: Displaying testResult using cat

```
1. /home/punam/IPL/RCB $ cat testResult
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. aaabb Aaaaa
9. AAAAA
10. bbbcc Bbbbb
11. BBBBB
12. ff-ff Ccccc CCCCC
13. cccdd Ddddd
14. DDDDD
15. aaabb Aaaaa
16. AAAAA
17. bbbcc Bbbbb
18. BBBBB
19. ff-ff Ccccc CCCCC
20. cccdd Ddddd
21. DDDDD
```

Task 13:

Command: cat test[XYZ]

```
1. /home/punam/IPL/RCB $ cat test[XYZ]
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. aaabb Aaaaa
9. AAAAA
10. bbbcc Bbbbb
11. BBBBB
12. ff-ff Ccccc CCCCC
13. cccdd Ddddd
14. DDDDD
15. aaabb Aaaaa
16. AAAAA
17. bbbcc Bbbbb
18. BBBBB
19. ff-ff Ccccc CCCCC
20. cccdd Ddddd
21. DDDDD
```

Explanation:

Since all the three file testX testY testZ in this directory shared almost common name, so the contents of all three files was display with a single command cat test[XYZ]). To whole up, cat test [XYZ] is equivalent to cat testX testY testZ command.

Q.No.6. Usage of the chmod command

Task 14:

Command: Display access permission for the files in RCB directory

```
1. /home/punam/IPL/RCB $ ls -l
```

Response:

```
1. total 0
2. -rw-r--r-- 1 punam punam 216 Apr 20 18:20 testResult
3. -rw-r--r-- 1 punam punam  72 Apr 20 18:15 testX
4. -rw-r--r-- 1 punam punam  72 Apr 20 18:16 testY
5. -rw-r--r-- 1 punam punam  72 Apr 20 18:17 testZ
```

Command: Removing all access permission for the file testX

```
1. /home/punam/IPL/RCB $ chmod  -rwx testX
```

Command: Displaying access permission for the testX file

```
1. /home/punam/IPL/RCB $ ls -l testX
```

Response:

```
1. ---------- 1 punam punam 72 Apr 20 18:15 testX
```

Command: Trying to read testX file using any utility.

```
1. /home/punam/IPL/RCB $ cat testX
```

Response:

```
1. cat: testX: Permission denied
```

Command: Trying to write testX file using any utility.

```
1. /home/punam/IPL/RCB $ cat>>testX
```

Response:

```
1. bash: testX: Permission denied
```

Command: Add read and write access permissions for yourself for the testX file.

```
1. /home/punam/IPL/RCB $ chmod +rw testX
```

Command: Displaying access permission for the testX file

```
/home/punam/IPL/RCB $ ls -l testX
```

Response:

```
1. -rw-r--r-- 1 punam punam 72 Apr 20 18:15 testX
```

Command: Trying to read testX file using any utility

```
1. /home/punam/IPL/RCB $ cat testX
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
```

Command: Trying to write in testX file using any utility.

```
1. /home/punam/IPL/RCB $ cat>>testX
```

Response:

```
1. Onichan
2. ^Z
3. [1]+  Stopped                 cat >> testX
```

Task 15

Command: Changing to IPL directory

```
1. /home/punam/IPL/RCB $ cd ..
```

Command: Displaying access permission for RCB

```
1. /home/punam/IPL $ ls -ld RCB
```

Response:

```
1. drwxr-xr-x 1 punam punam 512 Apr 20 20:11 RCB
```

Command: Removing all access permissions for the RCB directory

```
1. /home/punam/IPL $ chmod -rwx RCB
```

Command: Displaying access permission for RCB

```
1. /home/punam/IPL $ ls -ld RCB
```

Response:

```
1. d--------- 1 punam punam 512 Apr 20 20:11 RCB
```

Command: Trying to read a file from RCB using any utility

```
1. /home/punam/IPL $ cat RCB/testX
```

Response:

```
1. cat: RCB/testX: Permission denied
```

Command: Trying to add a newfile into RCB

```
1. /home/punam/IPL $ touch RCB/newfile
```

Response:

```
1. touch: cannot touch 'RCB/newfile': Permission denied
```

Command: Trying to search in RCB using any command

```
1. /home/punam/IPL $ ls -l RCB/testX
```

Response:

```
1. ls: cannot access 'RCB/testX': Permission denied
```

Command: Adding read, write and execute access permissions for yourself for the RCB directory

```
1. /home/punam/IPL $ chmod u=+rwx RCB
```

Command: Displaying access permissions for RCB directory

```
1. /home/punam/IPL $ ls -ld RCB
```

Response:

```
1. drwx------ 1 punam punam 512 Apr 20 18:20 RCB
```

Command: Trying to read a file from RCB using any utility

```
1. /home/punam/IPL $ cat RCB/testX
```

Response:

```
1. aaabb Aaaaa
2. AAAAA
3. bbbcc Bbbbb
4. BBBBB
5. ff-ff Ccccc CCCCC
6. cccdd Ddddd
7. DDDDD
8. Onichan
```

Command: Trying to put a file into RCB using any utility

```
1. /home/punam/IPL $ touch RCB/newfile
```

Command: Trying to search in RCB using any command

```
1. /home/punam/IPL $ ls -l RCB/testX
```

Response:

```
1. -rw-r--r-- 1 punam punam 80 Apr 20 18:22 RCB/testX
```

Q.No.7. Usage of grep command

Command: changing to directory “Rajsthan Royal”

```
1. /home/punam/IPL $ cd "Rajsthan Royals"
```

Task 16

Command: grep bb testX

```
1. /home/punam/IPL/Rajsthan Royals $ grep bb testX
```

Response:

```
1. aaabb Aaaaa
2. bbbcc Bbbbb
```

Explanation:

When the 'grep bb testX' command has been executed the lines in content to testX files are shown where the counterpart for the word 'bb' can be found. Likewise, when we execute this command, we do not get the specific coordinate however it shows the lines with words containing the string we entered with grep respectively.

Command: grep -v bb testX

```
1. /home/punam/IPL/Rajsthan Royals $ grep -v bb testX
```

Response:

```
1. AAAAA
2. BBBBB
3. ff-ff Ccccc CCCCC
4. cccdd Ddddd
5. DDDDD
```

Explanation:

This command prints every one of the lines that do not coordinate with a pattern of bb in the testX file. However, the option '-v' shows all the lines except for the line having a coordinate with entered string.

Command: grep -n bb testX

```
1. /home/punam/IPL/Rajsthan Royals $ grep -n bb testX
```

Response:

```
1. 1:aaabb Aaaaa
2. 3:bbbcc Bbbbb
```

Explanation:

The '-n' flag prints the outcome with the line numbers. Along these lines, this command prints every single line with a match of bb with the line number in testX file.

Command: grep -l bb *

```
1. /home/punam/IPL/Rajsthan Royals $ grep -l bb *
```

Response:

```
1. testX
2. testY
3. testZ
```

Explanation:

The '-l' flag prints the name of the document that contains the word or string of characters and rejects the actual lines. Along these lines, this command print the file name(testX, testY, testZ) which incorporates the bb pattern in them.

Command: grep -i bb *

```
1. /home/punam/IPL/Rajsthan Royals $ grep -i bb *
```

Response:

```
1. testX:aaabb Aaaaa
2. testX:bbbcc Bbbbb
3. testX:BBBBB
4. testY:aaabb Aaaaa
5. testY:bbbcc Bbbbb
6. testY:BBBBB
7. testZ:aaabb Aaaaa
8. testZ:bbbcc Bbbbb
9. testZ:BBBBB
```

Explanation:

When the ‘grep’ command is regularly utilized it is case sensitive however when it is utilized with an option ‘-I’ the case sensitivity is eliminated. So, the match string for all lines is shown whether they are capitalized or lowercase.

Command: grep -I BB *

```
1. /home/punam/IPL/Rajsthan Royals $ grep -i BB *
```

Response:

```
1. testX:aaabb Aaaaa
2. testX:bbbcc Bbbbb
3. testX:BBBBB
4. testY:aaabb Aaaaa
5. testY:bbbcc Bbbbb
6. testY:BBBBB
7. testZ:aaabb Aaaaa
8. testZ:bbbcc Bbbbb
9. testZ:BBBBB
```

Explanation:

As depicted above option ‘-i’ removes the case awareness so every one of the lines containing ‘BB’; is shown independent of the instances of the strings.

Command: grep -c bb *

```
1. /home/punam/IPL/Rajsthan Royals $ grep -c bb *
```

Response:

```
1. testX:2
2. testY:2
3. testZ:2
```

Explanation:

The ‘-c’ flag shows the filename and count the lines where grep tracks down a match of the word. Subsequently, this command showed a file name and the quantity of lines where it found pattern ‘bb’.

Command: grep '^A' *

```
1. /home/punam/IPL/Rajsthan Royals $ grep '^A' *
```

Response:

```
1. testX:AAAAA
2. testY:AAAAA
3. testZ:AAAAA
```

Explanation:

This command shows every one of the lines and the individual name of the files where the line starts with the entered character. For this situation, the entered character is ‘A’ which is shown with its respective file name.

Command: grep -n '^' testX

```
1. /home/punam/IPL/Rajsthan Royals $ grep -n '^' testX
```

Response:

```
1. 1:aaabb Aaaaa
2. 2:AAAAA
3. 3:bbbcc Bbbbb
4. 4:BBBBB
5. 5:ff-ff Ccccc CCCCC
6. 6:cccdd Ddddd
7. 7:DDDDD
```

Explanation:

This n command prints the line number of the coordinating string of characters while '^' with 'n' flag displayed the line number with the substance of document testX.

Q.No.8. Aliasing

Task 17

Command: Creating alias for lsl and lsR

```
1. /home/punam/IPL/Rajsthan Royals $ alias lsl='ls-l'
2. /home/punam/IPL/Rajsthan Royals $ alias lsR='ls-R'
```

Command: Showing that our system stores them

```
1. /home/punam/IPL/Rajsthan Royals $ alias lsl lsR
```

Response:

```
1. alias lsl='ls-l'
2. alias lsR='ls-R'
```

Task 18

Command: Removing the aliases

```
1. /home/punam $ unalias lsl lsR
```

Command: Showing system does not store these aliases

Command: lsl

```
1. /home/punam $ lsl
```

Response:

```
1. bash: lsl: command not found
```

Command: lsR

```
1. /home/punam $ lsR
```

Response:

```
1. bash: lsR: command not found
```

Task 19

Command: Putting alias in environment file using .bashrc command

```
1. /home/punam $ nano .bashrc
2. /home/punam $ . .bashrc
```

Command: Displaying the aliases in system

```
1. punam@DESKTOP-F0CD9K1:~$ lsl
```

Response:

```
total 40
-rw-r--r-- 1 punam punam 24576 Apr 20 20:45 20048968cw2p2
-rw-r--r-- 1 punam punam  7459 Apr 20 11:47 cw2p2
-rw-r--r-- 1 punam punam   482 Apr 19 08:43 fileAY
-rw-r--r-- 1 punam punam   387 Apr 17 18:37 fileJL
-rw-r--r-- 1 punam punam   670 Apr 19 05:33 fileKC
drwxr-xr-x 1 punam punam   512 Apr 20 20:01 IPL
```

Command: Displaying aliases in system

```
punam@DESKTOP-F0CD9K1:~$ lsR
```

Response:

```
.:
20048968cw2p2  cw2p2  fileAY  fileJL  fileKC  IPL

./IPL:
 KKR  'Mumbai Indians'   Punjab  'Rajsthan Royals'   RCB

./IPL/KKR:

'./IPL/Mumbai Indians':

./IPL/Punjab:

'./IPL/Rajsthan Royals':
testX  testY  testZ

./IPL/RCB:
newfile  testResult  testX  testY  testZ
```

Task 20

Command: Displaying pathname

```
1. punam@DESKTOP-F0CD9K1:~$ export PS1="\`pwd\` $ “
2.
```

Command: Group of commands counting and displaying the number of files

```
1. /home/punam $ alias noAllf='ls -a | wc -l'
```

Command: Putting the alias in environmental file

```
1. /home/punam $ nano .bashrc
2. /home/punam $ . .bashrc
```

Task 21

Command: Displaying pathname

```
1. punam@DESKTOP-F0CD9K1:~$ export PS1="\`pwd\` $ "
```

Command: Group of commands counting recursively and displaying the number of all sub-directories in the working directory

```
1. /home/punam $ alias noAsubsir='ls -aR | wc -l'
```

Command: Putting the alias in environmental file

```
1. /home/punam $ nano .bashrc
2. /home/punam $ . .bashrc
```

Task 22

Command: Displaying pathname

```
1. punam@DESKTOP-F0CD9K1:~$ export PS1="\`pwd\` $ "
```

Command: Group of commands counting and displaying the number of files name starting with g, t and w in working directory

```
1. /home/punam $ alias noAcs='la -a | grep ^[gtw] | wc -l'
```

Command: Putting the alias in the environment files

```
1. /home/punam $ nano .bashrc
2. /home/punam $ . .bashrc
```

Q.No.9. Usage of our own commands

Task 23

Command: Showing the alias noAllf

```
1. punam@DESKTOP-F0CD9K1:~$ noAllf
```

Response:

```
1. 15
```

Task 24

Command: Showing the alias noAsubsir

```
punam@DESKTOP-F0CD9K1:~$ noAsubsir
```

Response:

```
1. 67
```

Task 25

Command: Showing the alias noAcs

```
1. punam@DESKTOP-F0CD9K1:~$ noAcs
```

Response:

```
1. 0
```

Q.No.10. Command history

Task 26

Command: Listing the last command executed giving the history command

```
1. punam@DESKTOP-F0CD9K1:~$ fc -l
```

Response:

```
1.  688   lsR
2.  689   export PS1="\`pwd\` $ "
3.  690   alias noAllf='ls -a | wc -l'
4.  691   nano .bashrc
5.  692   . .bashrc
6.  693   export PS1="\`pwd\` $ "
7.  694   alias noAsubsir='ls -aR | wc -l'
8.  695   nano .bashrc
9.  696   . .bashrc
10. 697   export PS1="\`pwd\` $ "
11. 698   alias noAcs='la -a | grep ^[gtw] | wc -l'
12. 699   nano .bashrc
13. 700   . .bashrc
14. 701   noAllf
15. 702   noAsubsir
16. 703   noAcs
```

Task 27

Command: Re executing the command given six commands ago

```
1. punam@DESKTOP-F0CD9K1:~$ fc -e- -6
```

Response:

```
1. nano .bashrc
```

Task 28

Command: Re executing the last command which name begins with i

```
1. punam@DESKTOP-F0CD9K1:~$ fc -e- i
```

Response:

```
1. bash: fc: no command found
```

```
1. There are stopped jobs.
```

Conclusions

The tasks (i.e. 1-28) are completed successfully and are recorded in the script file named 20048968cw2p1. Since I learned about a few Linux commands, I was able to complete the coursework with a slight benefit. While doing this task I needed to confront the challenges particularly and I was likewise confused regarding some of the commands. Yet to conquer the confusion and troubles, a lot of explorers were finished through which I was able to assemble an abundance of information that helped me in finishing this coursework. Furthermore, scripting languages were utilized to build the software. Following the conclusion of the task, I had the eagerness to contemplate Linux commands and script languages. Here, a user-intuitive program was made that requests input from the client, approve it with the necessary message, and shows the data. This coursework has worked on how I might interpret Linux commands. Finishing every one of the program's tests, both effectively and fruitlessly, from the very beginning, this mission is by all accounts undeniably challenging to finish. The software was eventually successful after validating and checking every aspect of it. In addition, some rubbish is also cleaned before finalizing the report.

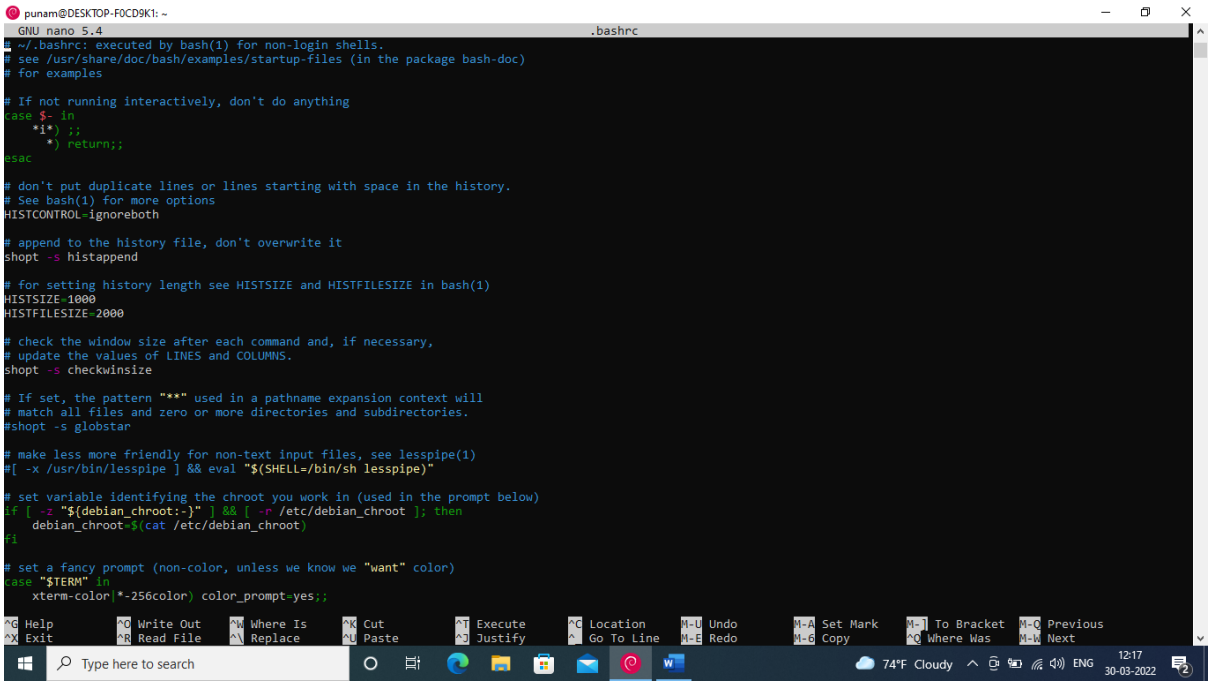
References

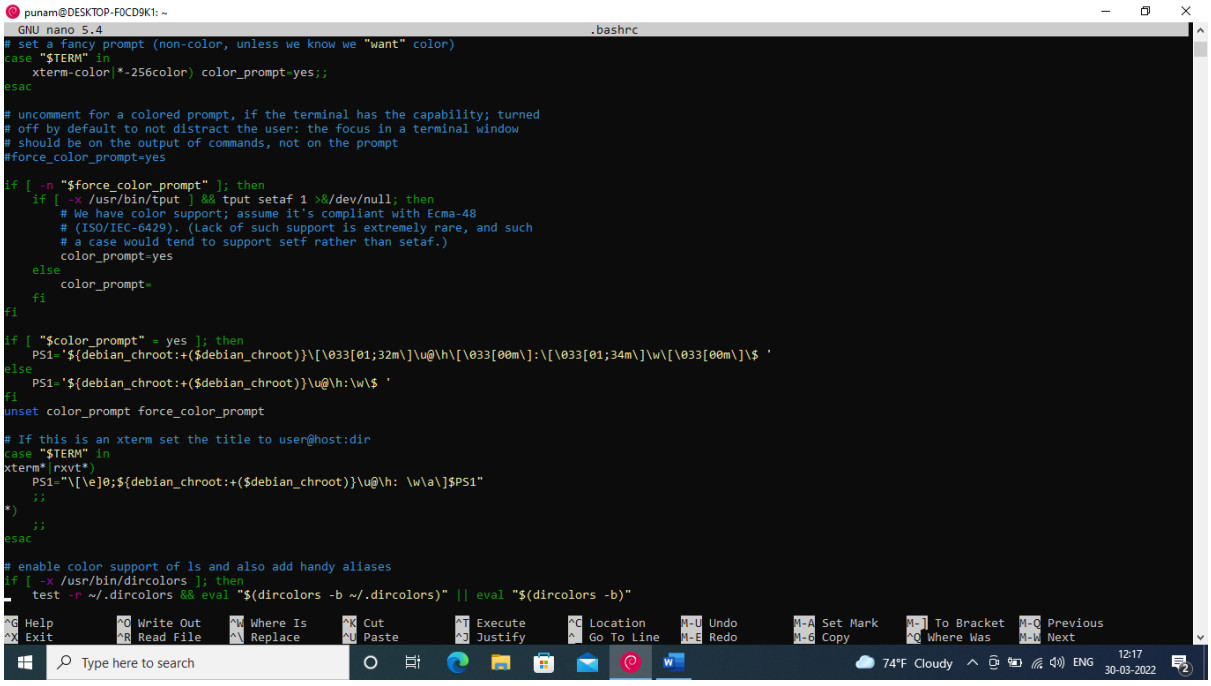
Sheldon, R., 2022. *What is Debian?.* [Online]

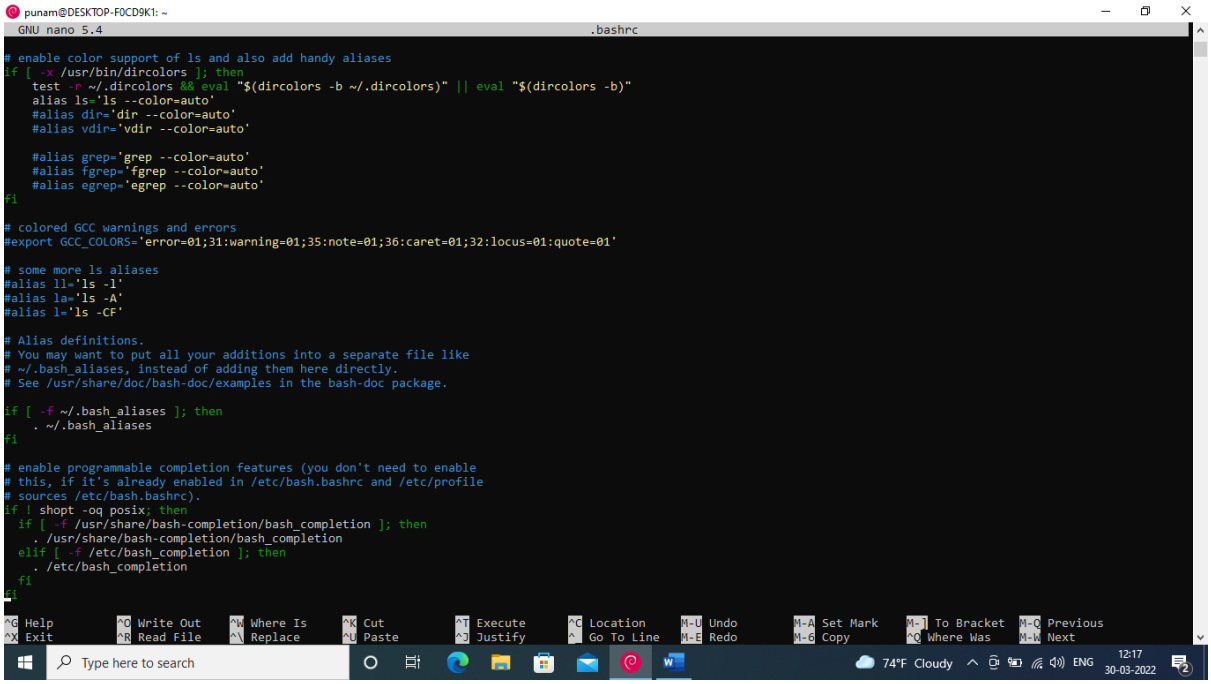
Available at: https://www.techtarget.com/searchdatacenter/definition/Debian

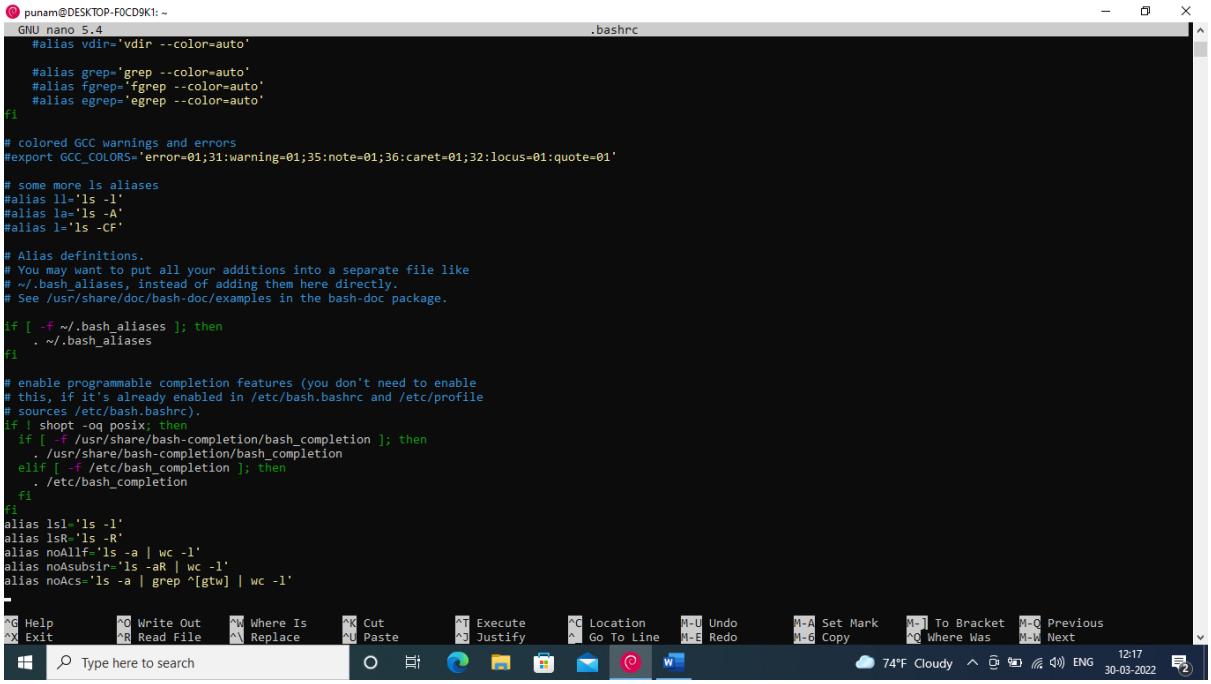
[Accessed 21 March 2022].

Screenshots






punam@DESKTOP-F0CD9K1: ~
GNU nano 5.4 .bashrc
# enable color support of ls and also add handy aliases
if [-x /usr/bin/dircolors]; then
test -r ~/.dircolors && eval "$(dircolors -b ~/.dircolors)" || eval "$(dircolors -b)"
alias ls='ls --color=auto'
#alias dir='dir --color=auto'
#alias vdir='vdir --color=auto'
#alias grep='grep --color=auto'
#alias fgrep='fgrep --color=auto'
#alias egrep='egrep --color=auto'
fi
colored GCC warnings and errors
#export GCC_COLORS='error=01;31:warning=01;35:note=01;36:caret=01;32:locus=01:quote=01'
some more ls aliases
#alias ll='ls -l'
#alias la='ls -A'
#alias l='ls -CF'
# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.
if [-f ~/.bash_aliases]; then
. ~/.bash_aliases
fi
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
if [-f /usr/share/bash-completion/bash_completion]; then
. /usr/share/bash-completion/bash_completion
elif [-f /etc/bash_completion]; then
. /etc/bash_completion
fi
fi
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-Q Previous
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-6 Copy ^Q Where Was M-W Next
Type here to search
74°F Cloudy
ENG
12:17
30-03-2022


punam@DESKTOP-F0CD9K1: ~
GNU nano 5.4 .bashrc
#alias vdir='vdir --color=auto'
#alias grep='grep --color=auto'
#alias fgrep='fgrep --color=auto'
#alias egrep='egrep --color=auto'
fi
colored GCC warnings and errors
#export GCC_COLORS='error=01;31:warning=01;35:note=01;36:caret=01;32:locus=01:quote=01'
some more ls aliases
#alias ll='ls -l'
#alias la='ls -A'
#alias l='ls -CF'
# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.
if [-f ~/.bash_aliases]; then
. ~/.bash_aliases
fi
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
if [-f /usr/share/bash-completion/bash_completion]; then
. /usr/share/bash-completion/bash_completion
elif [-f /etc/bash_completion]; then
. /etc/bash_completion
fi
fi
alias lsl='ls -l'
alias lsR='ls -R'
alias noAllf='ls -a | wc -l'
alias noAsubsir='ls -aR | wc -l'
alias noAcs='ls -a | grep ^[gtw] | wc -l'
^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark M-] To Bracket M-Q Previous
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^_ Go To Line M-E Redo M-6 Copy ^Q Where Was M-W Next
Type here to search
74°F Cloudy
ENG
12:17
30-03-2022