AJEENKYA D Y PATIL UNIVERSITY | THE INNOVATION UNIVERSITY

End Term Exam

REPORT

Academic Year	**2020-21**
Name of Program	**BCA – Data Science**
Semester	**1**
Name of Course	**Fundamental of UNIX**
Student Name:	**Sumit Pandey**
URN No:	**2020-B-13092002A**
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Contents :

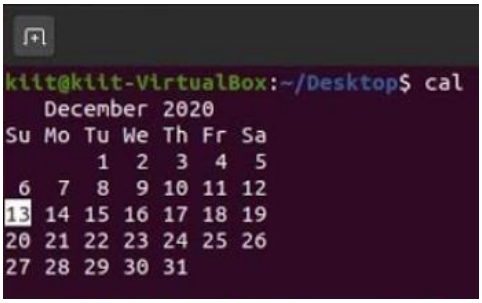
1. cal

Description of the Command: The **cal** command prints a calendar on the standard output.

Syntax: cal

Example: cal

Execution Screenshot:



2. cat

Description of the Command: The **cat** command allows us to create single or multiple files, view contain of file, concatenate files and redirect output in terminal or files.

Syntax: cat [OPTION] [FILE NAME]

Example: *cat textfile.txt* - will display content of textfile.txt
cat > textfile1.txt - will create a text file of name textfile1

Execution Screenshot:

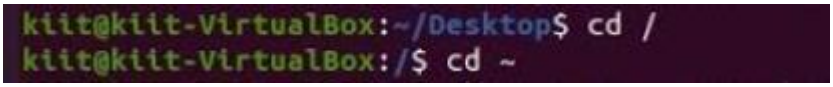
3. cd

Description of the Command: The **cd** command is used to change the directory.

Syntax – cd [directory name]

Example – ***cd /*** **-** this will move to root directory, or cd [directory name] will change the dir to that particular directory.

Execution Screenshot:



4. chmod

Description of the Command: The **chmod** command allows us to change/update file access permissions.

Syntax - chmod [OPTION] [FILE NAME]

Example - *chmod +x textfile.txt* - will give ;execute' (x) permission to textfile.txt.

Execution Screenshot:

5. clear

Description of the Command: The **clear** command lets you clear the terminal screen.

Syntax – clear

Execution Screenshot:

```
kiit@kiit-VirtualBox:~$ cd/
bash: cd/: Is a directory
kiit@kiit-VirtualBox:~$ clear
```

After executing 'clear' command:

6. cp

Description of the Command: The **cp** command allows us to copy files and directories from one location to another.

Syntax - cp [Guest File] [Host/New File]

Example – **cp textfile.txt newfile.txt** - contents of textfile is copied to newfile.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ cp file1.txt newfile.txt
kiit@kiit-VirtualBox:~/Desktop$ cat newfile.txt
Z for zebra
Hi my name is SUMIT PANDEY
```

7. cut

Description of the Command: The **cut** command allows us to extract portion of text.

Syntax : cut -[Option] [File_name]

Example : ***cut -c 2 newfile.txt*** **-** displays 2nd character from each line of a newfile.txt. after cutting.

Execution Screenshot:

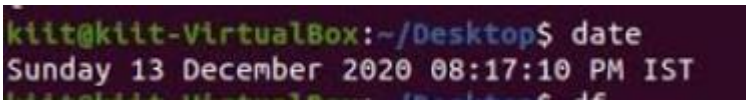
8. date

Description of the Command: The **date** command displays/sets the system date and time.

Syntax - date – this will show current date.

Example – ***date --set="10 OCT 2020 13:00:00"*** - this will set the given date.

Execution Screenshot:



9. df

Description of the Command: The **df** command shows disk file system space usage.

Syntax - df - [Option]

Example – ***df -a*** - shows all files of the disk,

df -h - shows space statistics in 'human readable' format, means it gives the details in mb, gb etc

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ df
Filesystem     1K-blocks    Used Available Use% Mounted on
udev             5578956       0   5578956   0% /dev
tmpfs            1121424    1324   1120100   1% /run
/dev/sda5       19992176 6867772  12085812  37% /
tmpfs            5607116       0   5607116   0% /dev/shm
tmpfs               5120       4      5116   1% /run/lock
tmpfs            5607116       0   5607116   0% /sys/fs/cgroup
/dev/loop0         56320   56320         0 100% /snap/core18/1880
/dev/loop2        223232  223232         0 100% /snap/gnome-3-34-1804/60
/dev/loop3         56704   56704         0 100% /snap/core18/1885
/dev/loop1        261760  261760         0 100% /snap/gnome-3-34-1804/36
/dev/loop4         51072   51072         0 100% /snap/snap-store/467
/dev/loop5         63616   63616         0 100% /snap/gtk-common-themes/1506
/dev/loop6         51968   51968         0 100% /snap/snap-store/481
/dev/loop7         31104   31104         0 100% /snap/snapd/9279
/dev/loop8         31744   31744         0 100% /snap/snapd/9607
/dev/sda1         523248       4    523244   1% /boot/efi
tmpfs            1121420      28   1121392   1% /run/user/1000
kiit@kiit-VirtualBox:~/Desktop$
```

10. dir

Description of the Command: The **dir** command lists the contents of a directory.

Syntax - dir

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ dir
B10  file1.txt  Kumar  newfile.txt  OM
```

11. du

Description of the Command: The **du** command shows disk space usage of files present in a directory & its sub-directories.

Syntax - du - [Option]

Example – ***du -a*** - shows all disk usage of files and directories.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ du
4       ./OM/oks
8       ./OM
4       ./Kumar
44      ./B10
68      .
```

12. echo

Description of the Command: The **echo** command prints a text of line provided to it.

Syntax - echo "Hello" - This will print "Hello"

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ echo "this is an echo command"
this is an echo command
```

13. exit

Description of the Command: The **exit** command is used to exit a shell.

Syntax – exit

14. man

Description of the Command: The **man** command is used to view the on-line reference manual pages for commands/programs.

Syntax – man man – this will show information about man command.

Execution Screenshot:

15. mkdir

Description of the Command: The **mkdir** command is used to create single or more directories.

Syntax - mkdir - [New Dir name]

Example – ***mkdir newdir*** - makes a new directory of name ‘newdir’.

Execution Screenshot:

16. mv

Description of the Command: The **mv** command is used to rename files or directories, move a file or directory to another location.

Syntax - mv [current_name] [new_name]

Example – ***mv project unix_project*** - renames ‘project’ as ‘unix_project’.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ mv file1.txt file0.txt
kiit@kiit-VirtualBox:~/Desktop$ cat file0.txt
Z for zebra
Hi my name is SUMIT PANDEY
```

17. passwd

Description of the Command: The **passwd** command is used to create/update passwords for user accounts.

Syntax - passwd [user's name]

Example – **passwd** user *(user's name is 'user' only.)*

current password -

new password -

Your typed password won't be visible.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ passwd
Changing password for kiit.
Current password:
```

18. paste

Description of the Command: The **paste** command allows us to merge lines of files.

Syntax - paste - [Option] [File_name]

Example – **paste -d, -s newfile.txt** - will join all lines and separate them with a comma after applying paste command

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ paste -d, -s newfile.txt
Z for zebra,Hi my name is SUMIT PANDEY
```

19. pwd

Description of the Command: The **pwd** command displays the name of current/working directory.

Syntax - pwd [OPTION]

Example – ***echo "$PWD $OLDPWD"*** - checks the current & previous working directory in one go.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ pwd
/home/kiit/Desktop
```

20. rmdir

Description of the Command: The **rmdir** command is to delete/remove empty directories.

Syntax - rmdir [DIRECTORY NAME]

Example – ***rmdir newdir*** - deletes 'newdir' directory.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ rmdir newdir
kiit@kiit-VirtualBox:~/Desktop$ dir
B10  file0.txt  Kumar  newfile.txt  OM
```

21. sort

Description of the Command: The **sort** command is to sort lines of text in the specified file(s) or from stdin.

Syntax - sort [OPTION[[FILE NAME]

Example – *sort textfile.txt* - this simply sorts 'textfile' in alphabetical order (by default).

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ sort file0.txt
Hi my name is SUMIT PANDEY
Z for zebra
```

22. tail

Description of the Command: The **tail** command is used to show last lines (10 lines by default) of the specified file.

Syntax - tail - [Option] [file name]

Example – ***tail -5 textfile.txt*** - shows last 5 lines of textfile.txt.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ tail -n1 file0.txt
Hi my name is SUMIT PANDEY
```

23. touch

Description of the Command: The **touch** command is used to change file timestamps; it can also be used to create a file.

Syntax - touch - [Option] [FILE NAME]

Example – ***touch empty_file*** - this simply creates an empty (zero byte) new file called 'empty_file'.

Execution Screenshot: we can see word count is zero for empty_file.

```
kiit@kiit-VirtualBox:~/Desktop$ touch empty_file.txt
kiit@kiit-VirtualBox:~/Desktop$ wc empty_file.txt
0 0 0 empty_file.txt
```

24. wc

Description of the Command: The **wc** command is used to display newline, word, byte counts for each file specified & total for many files.

Syntax - wc - [Option] [file name]

Example – ***wc filetext.txt*** - this simply shows number of lines, words, bytes along with the file's name.

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ wc file0.txt
 2  9 39 file0.txt
```

25. who

Description of the Command: The **who** command is used to show information about users who are currently logged in.

Syntax - who

Execution Screenshot:

```
kiit@kiit-VirtualBox:~/Desktop$ who
kiit     :0           2020-12-13 20:22 (:0)
```