Ex.No:1.a	**BASICS OF UNIX COMMANDS**
	INTRODUCTION TO UNIX

AIM:

To study about the basics of UNIX

UNIX:

It is a multi-user operating system. Developed at AT & T Bell Industries, USA in 1969.

Ken Thomson along with Dennis Ritchie developed it from MULTICS (Multiplexed Information and Computing Service) OS.
By1980, UNIX had been completely rewritten using C language.

LINUX:

It is similar to UNIX, which is created by Linus Torualds. All UNIX commands works in Linux. Linux is a open source software. The main feature of Linux is coexisting with other OS such as windows and UNIX.

STRUCTURE OF A LINUXSYSTEM:

It consists of three parts.

a)UNIX kernel
b) Shells
c) Tools and Applications

UNIX KERNEL:

Kernel is the core of the UNIX OS. It controls all tasks, schedule all Processes and carries out all the functions of OS.

Decides when one programs tops and another starts.

SHELL:

Shell is the command interpreter in the UNIX OS. It accepts command from the user and analyses and interprets them

Ex.No:1.b	BASICS OF UNIX COMMANDS
	BASIC UNIX COMMANDS

AIM:

To study of Basic UNIX Commands and various UNIX editors such as vi, ed, ex and EMACS.

CONTENT:
Note: Syn->Syntax

a) date
–used to check the date and time

Syn:$date

Format	Purpose	Example	Result
+%m	To display only month	$date+%m	06
+%h	To display month name	$date+%h	June
+%d	To display day of month	$date+%d	O1
+%y	To display last two digits of years	$date+%y	09
+%H	To display hours	$date+%H	10
+%M	To display minutes	$date+%M	45
+%S	To display seconds	$date+%S	55

b) cal
–used to display the calendar

Syn:$cal 2 2009

c)echo
–used to print the message on the screen.

Syn:$echo "text"

d) ls
–used to list the files. Your files are kept in a directory.

Syn:$lsls–s

All files (include files with prefix)

ls–l Lodetai (provide file statistics)

ls–t Order by creation time

ls– u Sort by access time (or show when last accessed together with –l)

ls–s Order by size

ls–r Reverse order

ls–f Mark directories with /,executable with* , symbolic links with @, local sockets with =, named pipes(FIFOs)with

ls–s Show file size

ls– h" Human Readable", show file size in Kilo Bytes & Mega Bytes (h can be used together with –l or)

ls[a-m]*List all the files whose name begin with alphabets From „a" to „m"
ls[a]*List all the files whose name begins with „a" or „A"
Eg:$ls>my list Output of „ls" command is stored to disk file named „my list"

e)lp
  –used to take printouts
Syn:$lp filename
f)man
  –used to provide manual help on every UNIX commands.
Syn:$man unix command
$man cat

g)who & whoami
–it displays data about all users who have logged into the system currently. The next command
displays about current user only.
Syn:whowhoami

h) uptime
  –tells you how long the computer has been running since its last reboot or power-off.
Syn:$uptime

i)uname
  –it displays the system information such as hardware platform, system name and processor, OS type.
Syn:$uname–a

j) hostname
  –displays and set system host name
Syn:$ hostname

k) bc
–stands for „best calculator"

$bc	$ bc	$ bc	$ bc
10/2*3	scale =1	ibase=2	sqrt(196)
15	2.25+1	obase=16	14 quit
	3.35	11010011	
	quit	89275	
		1010	
		Ā	
		Quit	

$bc	$ bc-l
for(i=1;i<3;i=i+1)I	scale=2
1	s(3.14)
2	0
3 quit	

FILE MANIPULATION COMMANDS

a) **cat**–this create, view and concatenate files.

Creation:
Syn:$cat>filename

Viewing:
Syn:$cat filename

Add text to an existing file:
Syn:$cat>>filename

Concatenate:
Syn:$catfile1file2>file3
  $catfile1file2>>file3 (no over writing of file3)

b) **grep**–used to search a particular word or pattern related to that word from the file.
Syn:$grep search word filename
Eg:$grep anu student

c) **rm**–deletes a file from the file system
Syn:$rm filename

d) **touch**–used to create a blank file.
Syn:$touch file names

e) **cp**–copies   the   files   or
directories   Syn:$cpsource   file
destination file Eg:$cp   student
stud

f) **mv**–to rename the file or directory
syn:$mv old file new file
Eg:$mv–i student student list(-i prompt when overwrite)

g) **cut**–it cuts or pickup a given number of character or fields of the file.
Syn:$cut<option><filename>
 Eg: $cut –c filename
$cut–c1-10emp
$cut–f 3,6emp
$ cut –f 3-6 emp
-c cutting columns
-f cutting fields

h) **head**–displays10 lines from the head(top)of a given file
Syn:$head filename
Eg:$head student

Syn:$head-2student

i) **tail**–displays last 10 lines of the file
Syn:$tail filename
Eg:$tail student
To display the bottom two lines;
Syn:$ tail -2 student

j) **chmod**–used to change the permissions of a file or directory.
Syn:$ch mod   category   operation   permission file
Where, Category–is the user type
   Operation–is used to assign or remove permission
   Permission–is the type of permission
   File–are used to assign or remove permission all

Examples:
$chmodu-wx student
Removes write and execute permission for users
$ch modu+rw,g+rwstudent
Assigns read and write permission for users and groups
$chmodg=rwx student
Assigns absolute permission for groups of all read, write and execute permissions

k) **wc**–it counts the number of lines, words, character in a specified file(s)
   with the options as –l,-w,-c

Category	Operation	Permission
u– users	+assign	r– read
g–group	-remove	w– write
o– others	=assign absolutely	x-execute

Syn: $wc –l filename
$wc –w filename
$wc–c filename