**List of programs for Viva**

1. Write a program to list out all the system call errors

2. Write a Program to demonstrate that errno retains the last system call error code even after asuccessful call is made

3. Write a program to copy first 10 characters of f1.txt into f2.txt

4. Write a program to print first 10 characters of a given file (user inputs the file name) to the

standard output.

5. Write a program to read a file (an argument to your program) and displays the file with lines to standard output having 1 character (ie a newline has to be added after each character)

6. Write a program to read a file (an argument to your program) and copy the content to new file

having 10 characters (ie a newline has to be added after the 10 th character)

7. Write a program that prints the 15th character of a file.

Note: Use only system calls for the above programs

8. Write a C program that takes 2 file names as arguments and 2 possible options

Split or concat

Eg

filcon [s/c] f1 f2

-s splits the file f1

-c concats f1 and f2

9. Write a program to count the number of lines in a given file.

10. WAP to count the number of spaces in a given file.

11. WAP to count the number of vowels.

12. WAP to count the number of words.

13. WAP to replace all the occurrence of a given word with another word.

14. WAP to delete the occurrence of a word

15. WAP to count the frequency of a given word

16. WAP to display the size of the file.

17. WAP to display the file access permission.

18. WAP to perform the following sequence of operations.

*  Open the file in a write only mode. If the file doesn't exist then create it.
*  Display only the access mode details
*  Check whether the append mode is enabled or not.
*  If not then enable the append mode.
*  Display the proper message after each action.

19. WAP to perform the following sequence of operations.

*  open a file in an append mode.
*  Insert some text.
*  Disable the append mode
*  Display the proper message after each action.

20. Write a program to display file access permission

21. Write a program to display size of the given file

22. Write a program to display whether the given file name exists or not

23. Write a program to display user and group user id for a given file

24. Write a program to implement chmod command

25. Write a program to implement touch command

26. Write a program to display the regular files in the current working directory.

27. Write a program to display the regular files in the parent directory.

28. Write a program to display the regular files in the given directory.

29. Write a program to display the directory files in the current working directory.

30. Write a program to display the directory files in the parent directory.

31. Write a program to display the directory files in the given directory.

**Assignment on files and directories**

Write a program to implement following command  
Ls (without –l option)  
Cp  
Mkdir  
Rmdir  
Mv  
Cd  
tree

## Assignment on files and directives - 1

1.Write a program to display all the files in a given directory

2.Write a program to print the current working directory

3.Write a program to change the directory

4.Write a program to display all the files in a given directory which starts with letter a

5.Write a program to change directory one level up

6.Write a program to set the last access and modified time of a given file to that of another given file. (i.e enter two files say f1 and f2. You need to set last access & modified time of f1 to that of f2)

7.Write a program to count the number of directories in your current working directory

8.Write a program to create a symbolic link for a given file in a given directory.

9.Write a program to create a hard link for a given file in a given directory.

10.Write a program to display the number of links for a given file

11.Write a program to implement ls –l command

**Assignment on Process control**

1. Write a program that lists files and directories in the current working directory.

Create a new process to list the files and directories

Your program should also print following from the child process:

* The process id
* The parent id
* The process group id

and from the parent process:

* the process id
* the parent id
* the process group id

2. Write a program to perform the following operation

* In parent process, display the files in parent folder
* In Child process print the files in a given directory

3. Write a program to perform the following operation

* Accept n numbers from the user
* In the parent process display the numbers in ascending order
* In child process display the numbers in descending order

## Assignment on process control

1. Implement the C program in which main program accepts the integers and stores them in a file. Main program uses the fork system call to create a new process called a child process. Child process reads the numbers from the file and sorts them using any sorting algorithm.
2. Write a program in C that creates a child process, waits for the termination of the child and lists its PID, together with the state in which the process was terminated.
3. Write two programs : one called client.c, the other called server.c. The  
   client program reads two integers from the keyboard and option ’+’ or ’-’. The read information is transmitted with the help of the system call exce\* to a child process, which executes the server code. After the child (server) process finishes the operation, it prints the result on the screen.
4. Write two programs : one called client.c, the other called server.c. The  
   client program reads two integers from the keyboard and option ’+’ or ’-’. The read information is transmitted with the help of the system call exce\* to a child process, which executes the server code. After the child (server) process finishes the operation, it returns the value to the client.

***Standard I/O Library***

* Write a program to store the student details consisting of Name, Roll No, Marks in 4 subject.
* Write a program to display the records where student name starts with letter A
* Write a program to delete a particular line from the file.
* Write a program to insert a line of text at a given line number.
* Write a program to store and retrieve employee details (Emp no, name, salary). Display the highest paid employee record.
* Write a program to copy the content of one file into another file with each of the words reversed. (i.e if file content is welcome to dcst then new file contains emoclew ot tscd)