

A Mini Project Report

on

File Handling

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Date:06/09/18

CERTIFICATE

This is to certify that, Nikhil Potale(B329), Prashant Walunj(B350),Aditya Raj(B351).

of class TYBTECH; have successfully completed their mini project work on “File Handling’’ at MIT ACADEMY OF ENGINEERING in the partial fulfilment of the Graduate Degree course in TYBTECH at the department of COMPUTER ENGINEERING, in the academic Year 2018-2019 Semester – I (Cycle-1).

Mrs. Kavitha S Prof. Shitalkumar Jain

And Head of Department

Mr. Diptee Chikmurge. (Department of Computer Engineering)

Guide

## 

## 

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**ABSTRACT**

A file handling system which allows the user to define a file structure according to his own needs is described. The operations on the file include the ability Create, Search, Rename, append new entries, modify them as well as delete unwanted ones and list the entries in a sorted order. In order to meet this the end of file structure was used and appropriate functions were designed and implemented. Included all types of system calls are used. The whole project was tested an its performace evaluated.

**Acknowledgements**

File Hnadling is the project we got for the first semester mini project in the third year of our engineering studies. I think this a very great opportunity to showcase our knowledge in terms of practical knowledge

I would like to show a very great gratitude towards our project guide i.e. Mrs. Diptee Chickmurge Mam and Mrs. Kavitha Mam. They both encouraged and helped us in our very first project. Diptee Mam provided us the backend information and the structure part of our

project and helped us with the front end of the project.

Also, I would like to thank our HOD Sir Mr. Shitalkumar Jain for being a very good supporter and inspiration to lead us towards our goal. He provided us different means to collect the information about various facts that are correlated with our project. The guidance helped us to complete the project in time.

At the academics level I would also like to thank our Principal Sir and the whole management team which is working in our campus

Finally, I would like to give a special gratitude to our team, Nikhil, Prashant, Aditya. They are like a small family to me.

**OBJECTIVES**

* To provide a detailed description of File Handling.
* To discuss how to Create, Delete, rename, search, change permission, change size, Adding user etc.
* To discuss the various types of System Calls And Shell commands are used for various tasks.
* To Check the current status of running process of the processor of file.

**OUTCOMES**

We are going to implement the project File Handling. In this by running it we can be able to do various file handling tasks.

Having read this section you should be able to:

1. open a file for reading or writing
2. read/write the contents of a file
3. close the file
4. Create Directory
5. Rename file
6. Search file
7. Changing file permissions
8. Showing file size
9. Adding user
10. Showing uptime
11. Displaying process in current shell

**INTRODUCTION:**

In [computing](https://en.wikipedia.org/wiki/Computing), a file system or filesystem controls how data is [stored](https://en.wikipedia.org/wiki/Computer_data_storage) and retrieved. Without a file system, information placed in a storage medium would be one large body of data with no way to tell where one piece of information stops and the next begins. By separating the data into pieces and giving each piece a name, the information is easily isolated and identified. Taking its name from the way paper-based information systems are named, each group of data is called a "[file](https://en.wikipedia.org/wiki/Computer_file)". The structure and logic rules used to manage the groups of information and their names is called a "file system".

There are many different kinds of file systems. Each one has different structure and logic, properties of speed, flexibility, security, size and more. Some file systems have been designed to be used for specific applications. For example, the [ISO 9660](https://en.wikipedia.org/wiki/ISO_9660) file system is designed specifically for [optical discs](https://en.wikipedia.org/wiki/Optical_disc).

The project is developed using ShellScript. The main purpose of developing the Project was to ease the job of the user to perform daily activities and update it. The project aide help to user at tip of their finger. The main feature are Creating, Deleting, Renaming, Displaying, rename, search, changing permissions, create directory, showing file size.

**Implementation**

Creating files

Every once in a while you will run into a situation where you need to create an empty file. Sometimes applications expect a log file to be present before they can write to it. In these situations, you can use the touch command to easily create an empty file:

$ touch test1  
$ ls -il test1  
1954793 -rw-r--r-- 1 rich rich 0 Sep 1 09:35 test1  
$

The touch command creates the new file you specify, and assigns your username as the file owner. Since I used the -il parameters for the ls command, the first entry in the listing shows the inode number assigned to the file. Every file on the Linux system has a unique inode number.

echo " Enter the filename which u want to b create: "

read filename

if test -f $filename

then

echo " File is already existed "

else

if touch $filename

then

echo " File is created\n "

fi

Renaming files

In the Linux world, renaming files is called moving. The mv command is available to move both files and directories to another location:

$ mv test2 test6

echo " Enter the filename which u want to b rename: "

read file11

echo " Enter the name of file:\n"

read file22

if test -f $file11

then

mv $file11 $file22

echo " File is successfully renamed\n "

else

echo " Operation unsuccessful \n"

fi

Deleting files

Most likely at some point in your Linux career you’ll want to be able to delete existing files. Whether it’s to clean up a filesystem or to remove a software package, there’s always opportunities to delete files.

In the Linux world, deleting is called removing. The command to remove files in the bash shell is rm. The basic form of the rm command is pretty simple:

$ rm -i test2

rm: remove `test2’? y

echo " Enter the filename which u want to b delete: "

read filename1

if test -f $filename1

then

rm $filename1

echo " File is successfully deleted \n"

else

echo " Operation unsuccessful\n "

fi

Creating directories

There’s not much to creating a new directory in Linux, just use the mkdir command:

$ mkdir dir3

echo " Enter the directory name which u want to b create: "

read directoryname

if test [ -d $directoryname ]

then

echo " Directory is already existed "

else

if mkdir $directoryname

then

echo " Directory is created "

fi

fi

Copying file

Copying files and directories from one location in the filesystem to another is a common practice for system administrators. The cp command provides this feature.

In it’s most basic form, the cp command uses two parameters: the source object and the destination object: cp source destination

When both the source and destination parameters are filenames, the cp command copies the source file to a new file with the filename specified as the destination. The new file acts like a brand new file, with an updated file creation and last modified times:

$ cp test1 test2

echo " Enter the filename which u want to b copy: "

read file1

echo " The destination file is: "

read file2

if test -f $file1

then

cp $file1 $file2

echo " File is successfully copied\n "

else

echo " Operation unsuccessful \n"

listing file

The most basic feature of the shell is the ability to see what files are available on the system. The list command (ls) is the tool that helps do that. This section describes the ls command, and all of the options available to format the information it can provide.

Deleting directories

Removing directories can be tricky, but there’s a reason for that. There are lots of opportunity for bad things to happen when you start deleting directories. The bash shell tries to protect us from accidental catastrophes as much as possible. The basic command for removing a directory

is rmdir:  
$ rmdir dir3  
$ rmdir dir1

**PLANNING**

Understanding the problem definition

Gathering information about required software resources

Gathering information about required hardware resources

Preparing preliminary design of overall workflow of project

**SOFTWARE AND HARDWARE USED**

**Software** :

* Linux Operating system is used
* Vs code is used
* Bash shell is used

**Language**:

* ShellScrit is used

**Implementation with code**

#!/bin/bash

#My first script

ch=1

while [ $ch -le 17 ]

do

echo " 1.Create a directory:"

echo " 2.create file:"

echo " 3.copy: "

echo " 4.rename"

echo " 5.delete"

echo " 7.present working directory:"

echo " 8.search:"

echo " 9.add user:"

echo " 10.delete user"

echo " 11.FAP"

echo " 12.display"

echo " 13.uptime:"

echo " 14.Display process in current shell "

echo " 15.Display all information about all processes "

echo " 16.show the file size:"

echo " 17.thank:"

echo " Enter your choice "

read ch

case $ch in

(1) echo " Enter the directory name which u want to b create: "

read directoryname

if test [ -d $directoryname ]

then

echo " Directory is already existed "

else

if mkdir $directoryname

then

echo " Directory is created "

fi

fi

;;

(2) echo " Enter the filename which u want to b create: "

read filename

if test -f $filename

then

echo " File is already existed "

else

if touch $filename

then

echo " File is created\n "

fi

fi

;;

(3) echo " Enter the filename which u want to b copy: "

read file1

echo " The destination file is: "

read file2

if test -f $file1

then

cp $file1 $file2

echo " File is successfully copied\n "

else

echo " Operation unsuccessful \n"

fi

;;

(4) echo " Enter the filename which u want to b rename: "

read file11

echo " Enter the name of file:\n"

read file22

if test -f $file11

then

mv $file11 $file22

echo " File is successfully renamed\n "

else

echo " Operation unsuccessful \n"

fi

;;

(5)echo " Enter the filename which u want to b delete: "

read filename1

if test -f $filename1

then

rm $filename1

echo " File is successfully deleted \n"

else

echo " Operation unsuccessful\n "

fi

;;

(7) echo "present working directory:"

pwd

echo "\n"

;;

(8) echo "enter the file name to search:"

read -r a

if find . -maxdepth 1 -name "$a" -print -quit | grep -q .

then

echo "You found the file.\n"

else

echo "You haven't found the file.\n"

fi

;;

(9) echo " Add user "

read username

useradd $username

echo " User added successfully.\n "

;;

(10)echo " Delete user "

read username

userdel $username

echo " User deleted successfully.\n "

;;

(11)echo " Enter the file name "

read filename6

if test -f $filename6

then

echo " Enter the permission for owner."

read u

echo " Enter the permission for group. "

read g

echo " Enter the permission for other. \n"

read o

chmod $u$g$o $filename

else

echo " File does not existed.\n "

fi

;;

(12)echo "\n Display the File access permissions "

read filename4

ls -l $filename

;;

(13)echo "the output has got for parts:currenttime,uptime,number of users and average load mentioned earlier"

echo "\n"

uptime

;;

(14)echo " Display process in current shell "

ps -l

;;

(15)echo " Display all information about all processes "

ps -ef

;;

(16)echo " display the file size:"

read file007

if test -f $file007

then

du -h $file007

echo "display the size:"

else

echo "file not found:"

fi

;;

(17)echo "thanks:"

banner thanks

;;

esac

done

exit 0

**RESULTS**

aditya@aditya-HP-Pavilion-15-Notebook-PC:~$ cd Desktop/

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop$ cd operatingsystemlab/

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ ls -l

total 180

-rw-rw-r-- 1 aditya aditya 13 Oct 4 09:28 777

drwxrwxr-x 2 aditya aditya 4096 Oct 4 10:27 lll

drwxrwxr-x 2 aditya aditya 4096 Oct 2 20:52 mini

-rw-rw-r-- 1 aditya aditya 150828 Oct 4 09:51 mini.sh

drwxrwxr-x 2 aditya aditya 4096 Oct 4 09:27 mit

-rw-rw-r-- 1 aditya aditya 13 Oct 4 09:28 mit123

-rw-rw-r-- 1 aditya aditya 3065 Oct 4 09:53 operating.sh

-rw-rw-r-- 1 aditya aditya 3246 Oct 4 10:29 project.sh

drwxrwxr-x 2 aditya aditya 4096 Oct 4 10:28 riy

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ sh project.sh

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

1

Enter the directory name which u want to b create:

mitaoe

project.sh: 27: test: [: unexpected operator

Directory is created

project.sh: 4: [: -le: unexpected operator

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ sh project.sh

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

2

Enter the filename which u want to b create:

mitaoealandi

File is created

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

3

Enter the filename which u want to b copy:

mitaoe

The destination file is:

mitaoealandi

Operation unsuccessful

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

1

Enter the directory name which u want to b create:

mit

project.sh: 27: test: [: unexpected operator

Directory is created

project.sh: 4: [: -le: unexpected operator

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ sh project.sh

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

1

Enter the directory name which u want to b create:

mit

project.sh: 27: test: [: unexpected operator

Directory is created

project.sh: 4: [: -le: unexpected operator

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ 2

2: command not found

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ sh project.sh

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

2

Enter the filename which u want to b create:

mitaoe

File is created

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

2

Enter the filename which u want to b create:

mitaoe.sh

File is created

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

3

Enter the filename which u want to b copy:

mitaoe.sh

The destination file is:

mitaoe1.sh

File is successfully copied

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

4

Enter the filename which u want to b rename:

mitaoe.sh

Enter the name of file:

mitaoe2.sh

File is successfully renamed

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

5

Enter the filename which u want to b delete:

mitaoe2.sh

File is successfully deleted

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

7

present working directory:

/home/aditya/Desktop/operatingsystemlab

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

5

Enter the filename which u want to b delete:

mitaoe1.sh

File is successfully deleted

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

9

Add user

aditya396

useradd: Permission denied.

useradd: cannot lock /etc/passwd; try again later.

User added successfully.

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

9

Add user

aditya123

useradd: Permission denied.

useradd: cannot lock /etc/passwd; try again later.

User added successfully.

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

10

Delete user

aditya123

userdel: user 'aditya123' does not exist

User deleted successfully.

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

11

Enter the file name

7

File does not existed.

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

11

Enter the file name

mini.sh

Enter the permission for owner.

7

Enter the permission for group.

4

Enter the permission for other.

4

chmod: cannot access 'mitaoe.sh': No such file or directory

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

12

Display the File access permissions

mini.sh

ls: cannot access 'mitaoe.sh': No such file or directory

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

12

Display the File access permissions

mini.sh

ls: cannot access 'mitaoe.sh': No such file or directory

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

12

Display the File access permissions

project.sh

ls: cannot access 'mitaoe.sh': No such file or directory

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

13

the output has got for parts:currenttime,uptime,number of users and average load mentioned earlier

18:19:11 up 11 min, 1 user, load average: 0.02, 0.18, 0.21

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

14

Display process in current shell

F S UID PID PPID C PRI NI ADDR SZ WCHAN TTY TIME CMD

0 S 1000 1878 1859 0 80 0 - 5674 wait pts/8 00:00:00 bash

0 S 1000 2113 1878 0 80 0 - 1126 wait pts/8 00:00:00 sh

0 R 1000 2209 2113 0 80 0 - 7229 - pts/8 00:00:00 ps

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

15

Display all information about all processes

UID PID PPID C STIME TTY TIME CMD

root 1 0 0 18:07 ? 00:00:01 /sbin/init splash

root 2 0 0 18:07 ? 00:00:00 [kthreadd]

root 3 2 0 18:07 ? 00:00:00 [ksoftirqd/0]

root 4 2 0 18:07 ? 00:00:00 [kworker/0:0]

root 5 2 0 18:07 ? 00:00:00 [kworker/0:0H]

root 6 2 0 18:07 ? 00:00:00 [kworker/u16:0]

root 7 2 0 18:07 ? 00:00:00 [rcu\_sched]

root 8 2 0 18:07 ? 00:00:00 [rcu\_bh]

root 9 2 0 18:07 ? 00:00:00 [migration/0]

root 10 2 0 18:07 ? 00:00:00 [watchdog/0]

root 11 2 0 18:07 ? 00:00:00 [watchdog/1]

root 12 2 0 18:07 ? 00:00:00 [migration/1]

root 13 2 0 18:07 ? 00:00:00 [ksoftirqd/1]

root 14 2 0 18:07 ? 00:00:00 [kworker/1:0]

root 15 2 0 18:07 ? 00:00:00 [kworker/1:0H]

root 16 2 0 18:07 ? 00:00:00 [watchdog/2]

root 17 2 0 18:07 ? 00:00:00 [migration/2]

root 18 2 0 18:07 ? 00:00:00 [ksoftirqd/2]

root 20 2 0 18:07 ? 00:00:00 [kworker/2:0H]

root 21 2 0 18:07 ? 00:00:00 [watchdog/3]

root 22 2 0 18:07 ? 00:00:00 [migration/3]

root 23 2 0 18:07 ? 00:00:00 [ksoftirqd/3]

root 25 2 0 18:07 ? 00:00:00 [kworker/3:0H]

root 26 2 0 18:07 ? 00:00:00 [kdevtmpfs]

root 27 2 0 18:07 ? 00:00:00 [netns]

root 28 2 0 18:07 ? 00:00:00 [perf]

root 29 2 0 18:07 ? 00:00:00 [khungtaskd]

root 30 2 0 18:07 ? 00:00:00 [writeback]

root 31 2 0 18:07 ? 00:00:00 [ksmd]

root 32 2 0 18:07 ? 00:00:00 [khugepaged]

root 33 2 0 18:07 ? 00:00:00 [crypto]

root 34 2 0 18:07 ? 00:00:00 [kintegrityd]

root 35 2 0 18:07 ? 00:00:00 [bioset]

root 36 2 0 18:07 ? 00:00:00 [kblockd]

root 38 2 0 18:07 ? 00:00:00 [ata\_sff]

root 39 2 0 18:07 ? 00:00:00 [md]

root 40 2 0 18:07 ? 00:00:00 [devfreq\_wq]

root 41 2 0 18:07 ? 00:00:00 [kworker/u16:1]

root 42 2 0 18:07 ? 00:00:00 [kworker/2:1]

root 44 2 0 18:07 ? 00:00:00 [kswapd0]

root 45 2 0 18:07 ? 00:00:00 [vmstat]

root 46 2 0 18:07 ? 00:00:00 [fsnotify\_mark]

root 47 2 0 18:07 ? 00:00:00 [ecryptfs-kthrea]

root 63 2 0 18:07 ? 00:00:00 [kthrotld]

root 65 2 0 18:07 ? 00:00:00 [kworker/3:1]

root 66 2 0 18:07 ? 00:00:00 [acpi\_thermal\_pm]

root 67 2 0 18:07 ? 00:00:00 [bioset]

root 68 2 0 18:07 ? 00:00:00 [bioset]

root 69 2 0 18:07 ? 00:00:00 [bioset]

root 70 2 0 18:07 ? 00:00:00 [bioset]

root 71 2 0 18:07 ? 00:00:00 [bioset]

root 72 2 0 18:07 ? 00:00:00 [bioset]

root 73 2 0 18:07 ? 00:00:00 [bioset]

root 74 2 0 18:07 ? 00:00:00 [bioset]

root 79 2 0 18:07 ? 00:00:00 [ipv6\_addrconf]

root 92 2 0 18:07 ? 00:00:00 [deferwq]

root 93 2 0 18:07 ? 00:00:00 [charger\_manager]

root 141 2 0 18:07 ? 00:00:00 [kpsmoused]

root 142 2 0 18:07 ? 00:00:00 [kworker/2:2]

root 143 2 0 18:07 ? 00:00:00 [scsi\_eh\_0]

root 144 2 0 18:07 ? 00:00:00 [scsi\_tmf\_0]

root 145 2 0 18:07 ? 00:00:00 [scsi\_eh\_1]

root 146 2 0 18:07 ? 00:00:00 [scsi\_tmf\_1]

root 147 2 0 18:07 ? 00:00:00 [scsi\_eh\_2]

root 148 2 0 18:07 ? 00:00:00 [scsi\_tmf\_2]

root 149 2 0 18:07 ? 00:00:00 [scsi\_eh\_3]

root 150 2 0 18:07 ? 00:00:00 [scsi\_tmf\_3]

root 153 2 0 18:07 ? 00:00:00 [kworker/0:2]

root 155 2 0 18:07 ? 00:00:00 [kworker/u16:7]

root 157 2 0 18:07 ? 00:00:00 [ttm\_swap]

root 159 2 0 18:07 ? 00:00:00 [bioset]

root 160 2 0 18:07 ? 00:00:00 [bioset]

root 163 2 0 18:07 ? 00:00:00 [kworker/0:1H]

root 185 2 0 18:07 ? 00:00:00 [kworker/1:1H]

root 187 2 0 18:07 ? 00:00:00 [jbd2/sda2-8]

root 188 2 0 18:07 ? 00:00:00 [ext4-rsv-conver]

root 215 1 0 18:07 ? 00:00:00 /lib/systemd/systemd-journald

root 221 2 0 18:07 ? 00:00:00 [kauditd]

root 247 2 0 18:07 ? 00:00:00 [kworker/3:2]

root 249 2 0 18:07 ? 00:00:00 [kworker/2:1H]

root 261 1 0 18:07 ? 00:00:00 /lib/systemd/systemd-udevd

root 339 2 0 18:07 ? 00:00:00 [kworker/3:1H]

root 386 2 0 18:07 ? 00:00:00 [irq/45-mei\_me]

root 397 2 0 18:07 ? 00:00:00 [cfg80211]

systemd+ 642 1 0 18:07 ? 00:00:00 /lib/systemd/systemd-timesyncd

syslog 786 1 0 18:07 ? 00:00:00 /usr/sbin/rsyslogd -n

root 798 1 0 18:07 ? 00:00:00 /usr/sbin/cron -f

root 804 1 0 18:07 ? 00:00:00 /usr/sbin/thermald --no-daemon -

avahi 809 1 0 18:07 ? 00:00:00 avahi-daemon: running [aditya-HP

message+ 814 1 0 18:07 ? 00:00:00 /usr/bin/dbus-daemon --system --

avahi 846 809 0 18:07 ? 00:00:00 avahi-daemon: chroot helper

root 847 1 0 18:07 ? 00:00:00 /usr/lib/accountsservice/account

root 850 1 0 18:07 ? 00:00:00 /usr/sbin/acpid

root 853 1 0 18:07 ? 00:00:00 /usr/sbin/ModemManager

root 854 1 0 18:07 ? 00:00:00 /usr/sbin/NetworkManager --no-da

root 857 1 0 18:07 ? 00:00:00 /lib/systemd/systemd-logind

root 858 1 0 18:07 ? 00:00:00 /usr/sbin/cupsd -l

root 859 1 0 18:07 ? 00:00:00 /usr/sbin/cups-browsed

root 864 1 0 18:07 ? 00:00:00 /usr/lib/snapd/snapd

root 909 1 0 18:07 ? 00:00:00 /usr/sbin/irqbalance --pid=/var/

root 918 1 0 18:07 ? 00:00:00 /usr/sbin/lightdm

root 934 1 0 18:07 ? 00:00:00 /usr/lib/policykit-1/polkitd --n

root 940 918 1 18:07 tty7 00:00:07 /usr/lib/xorg/Xorg -core :0 -sea

lp 952 858 0 18:07 ? 00:00:00 /usr/lib/cups/notifier/dbus dbus

lp 953 858 0 18:07 ? 00:00:00 /usr/lib/cups/notifier/dbus dbus

mysql 969 1 0 18:07 ? 00:00:00 /usr/sbin/mysqld

root 994 1 0 18:07 ? 00:00:00 /sbin/wpa\_supplicant -u -s -O /r

whoopsie 1083 1 0 18:08 ? 00:00:00 /usr/bin/whoopsie -f

root 1089 1 0 18:08 tty1 00:00:00 /sbin/agetty --noclear tty1 linu

root 1130 918 0 18:08 ? 00:00:00 lightdm --session-child 12 19

rtkit 1195 1 0 18:08 ? 00:00:00 /usr/lib/rtkit/rtkit-daemon

root 1206 1 0 18:08 ? 00:00:00 /usr/lib/upower/upowerd

colord 1238 1 0 18:08 ? 00:00:00 /usr/lib/colord/colord

aditya 1262 1 0 18:08 ? 00:00:00 /lib/systemd/systemd --user

aditya 1263 1262 0 18:08 ? 00:00:00 (sd-pam)

aditya 1269 1 0 18:08 ? 00:00:00 /usr/bin/gnome-keyring-daemon --

aditya 1271 1130 0 18:08 ? 00:00:00 /sbin/upstart --user

aditya 1360 1271 0 18:08 ? 00:00:00 upstart-udev-bridge --daemon --u

aditya 1361 1271 0 18:08 ? 00:00:00 dbus-daemon --fork --session --a

aditya 1373 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/hud/wi

aditya 1397 1271 0 18:08 ? 00:00:02 /usr/bin/ibus-daemon --daemonize

aditya 1407 1271 0 18:08 ? 00:00:00 upstart-dbus-bridge --daemon --s

aditya 1408 1271 0 18:08 ? 00:00:00 upstart-dbus-bridge --daemon --s

aditya 1414 1271 0 18:08 ? 00:00:00 upstart-file-bridge --daemon --u

aditya 1425 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfsd

aditya 1430 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfsd-fuse /run/us

aditya 1439 1397 0 18:08 ? 00:00:00 /usr/lib/ibus/ibus-dconf

aditya 1440 1397 0 18:08 ? 00:00:00 /usr/lib/ibus/ibus-ui-gtk3

aditya 1446 1271 0 18:08 ? 00:00:00 /usr/lib/ibus/ibus-x11 --kill-da

aditya 1457 1397 0 18:08 ? 00:00:00 /usr/lib/ibus/ibus-engine-simple

aditya 1466 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/bamf/b

aditya 1471 1271 0 18:08 ? 00:00:00 gpg-agent --homedir /home/aditya

aditya 1481 1271 0 18:08 ? 00:00:01 /usr/lib/x86\_64-linux-gnu/hud/hu

aditya 1483 1271 0 18:08 ? 00:00:00 /usr/lib/unity-settings-daemon/u

aditya 1493 1271 0 18:08 ? 00:00:00 /usr/lib/at-spi2-core/at-spi-bus

aditya 1494 1271 0 18:08 ? 00:00:00 /usr/lib/gnome-session/gnome-ses

aditya 1502 1493 0 18:08 ? 00:00:00 /usr/bin/dbus-daemon --config-fi

aditya 1509 1271 0 18:08 ? 00:00:01 /usr/lib/x86\_64-linux-gnu/unity/

aditya 1526 1271 0 18:08 ? 00:00:00 /usr/lib/at-spi2-core/at-spi2-re

aditya 1530 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1531 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1532 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1533 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1542 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1544 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1546 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1547 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1578 1271 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-sou

aditya 1587 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/indica

aditya 1595 1483 0 18:08 ? 00:00:00 syndaemon -i 1.0 -t -K -R

aditya 1606 1271 0 18:08 ? 00:00:00 /usr/bin/pulseaudio --start --lo

aditya 1627 1271 0 18:08 ? 00:00:00 /usr/lib/dconf/dconf-service

aditya 1659 1494 0 18:08 ? 00:00:00 /usr/bin/gnome-software --gappli

aditya 1663 1271 1 18:08 ? 00:00:11 compiz

aditya 1664 1494 0 18:08 ? 00:00:00 /usr/lib/unity-settings-daemon/u

aditya 1665 1494 0 18:08 ? 00:00:00 /usr/lib/policykit-1-gnome/polki

aditya 1670 1494 0 18:08 ? 00:00:00 nm-applet

aditya 1672 1494 0 18:08 ? 00:00:04 nautilus -n

aditya 1688 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfs-udisks2-volum

root 1691 1 0 18:08 ? 00:00:00 /usr/lib/udisks2/udisksd --no-de

aditya 1705 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfs-mtp-volume-mo

aditya 1710 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfs-afc-volume-mo

aditya 1716 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfs-gphoto2-volum

aditya 1719 1271 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-cal

aditya 1724 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfs-goa-volume-mo

aditya 1734 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/notify

aditya 1751 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfsd-trash --spaw

aditya 1773 1271 0 18:08 ? 00:00:00 /usr/lib/gvfs/gvfsd-metadata

aditya 1785 1719 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-cal

aditya 1795 1271 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-add

aditya 1797 1719 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-cal

aditya 1822 1795 0 18:08 ? 00:00:00 /usr/lib/evolution/evolution-add

aditya 1857 1494 0 18:08 ? 00:00:00 zeitgeist-datahub

aditya 1859 1271 0 18:08 ? 00:00:02 /usr/lib/gnome-terminal/gnome-te

aditya 1869 1271 0 18:08 ? 00:00:00 /bin/sh -c /usr/lib/x86\_64-linux

aditya 1873 1869 0 18:08 ? 00:00:00 /usr/bin/zeitgeist-daemon

aditya 1878 1859 0 18:08 pts/8 00:00:00 bash

aditya 1890 1271 0 18:08 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/zeitge

aditya 1949 1494 0 18:09 ? 00:00:00 update-notifier

aditya 1990 1494 0 18:10 ? 00:00:00 /usr/lib/x86\_64-linux-gnu/deja-d

aditya 2006 1271 0 18:10 ? 00:00:00 /usr/lib/gvfs/gvfsd-network --sp

aditya 2035 1271 0 18:10 ? 00:00:00 /usr/lib/gvfs/gvfsd-dnssd --spaw

aditya 2113 1878 0 18:13 pts/8 00:00:00 sh project.sh

root 2117 2 0 18:13 ? 00:00:00 [kworker/1:2]

root 2149 2 0 18:14 ? 00:00:00 [kworker/2:0]

aditya 2212 2113 0 18:19 pts/8 00:00:00 ps -ef

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

16

display the file size:

mini.sh

148K    mini.sh

display the size:

1.Create a directory:

2.create file:

3.copy:

4.rename

5.delete

7.present working directory:

8.search:

9.add user:

10.delete user

11.FAP

12.display

13.uptime:

14.Display process in current shell

15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

17

thanks:

##### # # ## # # # # ####

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1.Create a directory:

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3.copy:

4.rename

5.delete

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12.display

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15.Display all information about all processes

16.show the file size:

17.thank:

Enter your choice

^Aproject.sh: 4: [: Illegal number:

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$ ^C

aditya@aditya-HP-Pavilion-15-Notebook-PC:~/Desktop/operatingsystemlab$

**CONCLUSION**

We have to concluded So far we have done file handling with GUI program. And one various File Handling tasks without knowing How it works. So that we have designed a program such that we can get to know behind the scenes of File Handling. The solution is to create program in Shell such that it can perform all the File Handling tasks easily and let our user do all File Handling tasks which He/She can do on GUI program.

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