Unix :

1969 – At&T DennisRetchie & Thompson

Solaris

Linux, Ubuntu

OperatingSystem – It is a software that acts as an interface between the computer/hardware and User/Application

Computer can understand 1s and 0s.As we cannot communicate in 1 and 0 OS acts

as an interface between user and computer.

Windows – 10 , 8, 7, vista, xp…..

MacOS

Unix – multitasking and multiuser OS

Tasks Of OperatingSystem:

DeviceManagement

IOManagement

MemoryManagement

FileManagement

ProcessManagement

We can interact with OS using GUI or Cmd line interface

To practice Unix commands:

MacOS – Go to terminal and execute the commands

Windows-We can install Cygwin, virtualbox- ubuntu or we can use google cloudconsole to practice the commands.

Go to <https://console.cloud.google.com/>

See that you are signed in to gmail

Create the new project- first time

Active google cloud shell

Open in new window

~ means root directory

. indicates current directory

ls –l :list all the files and directories inside a directory

ls –a : list all the files and directories inside a directory along with hidden files

cat filename – display the content of file

mkdir

touch

redirecting commands:

>

>>

<

eg : Cat > file1.txt : It takes input from user and send to text file

Cat < file1.txt : It takes input from file and send to cat command

after u type using cat>filename.txt- to go back to cmd mode- ctrl+d

cp – copy the file

Assume u have marchqa and marchui dirs in root dir

to copy file from rootdir to marchui when you are in marchqa

cp ~/file.txt ~/marchui

to copy file from rootdir to marchqa(current dir) when you are in marchqa

cp ~/file.txt .

cp ~/file.txt ~/marchui

mv – move the file or rename the file

rm – delete the file or directory

man – after u see manual if u want to go back to cmd mode- press q

who

sort: -r,-n,-m

grep

wc

| - combine 2 or more commands=> output of one command serves as input for other command

--Find no of lines which contain the word “error or exception”

--Count no of files in a directory where filename start with “log”

vi filename – u wil go to editor mode

to start typing in editor – press i

after u r done, to back to cmd mode

give esc, :, wq – one by one

now u wil go back to cmd mode

* count no of lines which have word “rdiff” from the recent 10 lines in log file

head – default it gives first 10 lines in file

head -5 filename – we can get first 5 lines in files

tail-– default it gives last 10 lines in file

more

less

permissions on file:

It is indicated by 10 character string

first char – file or directory

remaining 9 chars are divided into 3 groups of rwx(read, write, execute)

rwx - user

rwx – user group

rwx – all users

drwxrwxrwx

-rw-r--r—

a – all users

u - user

o – others

g - group

chmod a+wx file1.txt

ps

kill

netstat

top

Assignment:

copy the file which is in current directory to root directory using single command

copy the file which is in current directory to a sub directory under root directory using single command

sort the no of users for this machine

Find last 20 lines in given file which have given search word