Day 1

03-09-2021

Unix Training

Unix is an Operating system (OS) developed in Bell laboratories.

Unix is multi-tasking, multi-user, high secure and very high performance os

In Unix OS we can customize according to own requirement.

Unix is Open Source.

Unix is command base OS.

Unix flavors

Sun : Solaris

IBM : AIX

Apple : MAC

HP : HP-UX

Google : Android

Unix

And

Linux :it is GUI base

Shell : It is a command or instruction given to kernel through System call to execute some task.

Cd

Shell

1. Read line from standard input device (each of these line is called pipe line).
2. Splits the command into tokens.
3. Checks the token to see If it is a keyword.
4. Check the first word alias.
5. Then execute the command.

Unix Commands

1. echo
2. print
3. date --date ‘Date Format’: check other formats.
4. date +%d-%M-%Y : check other formats.

**File system :**

**pwd** : current directory path.

**ls** : it display all files and folder present in current directory.

mkdir folderName : This command is use to create the folder or directory

mkdir folderName folderName folderName : this command is use to create more than one folder.

rmdir folderName : This command is use to delete the folder.

cd folderName : this command is use to move inside a folder.

mv oldFolderName newFolderName : This command is use to change the folder.

folderName start with pre-fix . consider as hidden folder.

mkdir .folderName

ls : this command is use to display. Non hidden folder.

ls –a : This command I use to show normal as well as hidden folder.

Mv oldFolderName .folderName : This command is use to hide the folder.

cd .. : this command is use to move to parent directory of current directory.

cd ~ : this command is use to move to root directory.

Unix file system

Creating the file in Unix

1. cat command :
   1. creating file using cat command

cat > filename.txt : it create the new file with allow to enter the contents inside a file.

* 1. Reading the content from file using cat command

Cat < filename.txt or cat filename

* 1. Cat >> filename : this command is use to append the content in existing file.

1. Touch filename : This command is use to create the empty file

Touch filename filename filename

1. Using echo

echo “Welcome to Unix Training “ > filename

head and tail command :

head –n filename : this command is use to display the top n number line from a file

tail –n filename : this command is use to display the bottom n number of line from a file

wc : word count :

wc –l filename : number of lines

wc –w filename : number of words

wc –c filename : number of character

cp : copy the content from one file to another file.

cp sourcefilename destinationfilename.

Delete the file

rm filename

rm –I filename : it ask the confirmation to delete the file.

ls folderName : This command is use to display directory details.

rmdir folderName This command is use to delete the folder if folder is empty.

rm –r folderName This command is use to delete the folder doesn’t matter folder empty or contains set of files.

Filter command : flat file : in a file data entered by using delimiter ie space , \_, tab etc.

Employee.txt file with few records

cut -c 1 Employee.txt : 1 index position

cut -c 3 Employee.txt : 3 index position

cut -c 3-6 Employee.txt : 3 to 6 range index position

cut -d ' ' -f2 Employee.txt : -d delimiter ‘ ’ space f2 2nd columns

cut -d ',' -f1 Manager.txt : -d delimiter ‘,’

paste Employee.txt : display the content

paste –s Employee.txt : serial format

paste Employee.txt Manager.txt both file contents.

Tr ( translate command)

This command is use to translate data from one format to another format.

tr SET1 SET2 < Employee.txt

search SET1 content and replace by SET2 contents in file.

tr abcde ABCDE < Employee.txt

a-z A-Z < Employee.txt

tr ' ' , < Employee.txt

tr [:lower:] [:upper:] < Employee.txt : please work more pre-defined keywords to translate the content from file.

sort Employee.txt : ascending order as 1st field

sort –r Employee.txt : descending order

sort -k2 Manager.txt k2 send field

sort -k2 -t ',' Manager.txt -t delimiter ‘,’ by default space consider.

EmployeeInfo.txt

Id,Name,Salary,Desg, City, DeptId

4,Raj,19000,Developer,Bangalore,10

2,Raju,18000,Developer,Delhi,20

5,Ramesh,15000,Developer,Bangalore,20

8,Ajay,12000,Developer,Delhi,10

9,Vikash,19000,Developer,Bangalore,20

6,Ram,12000,Developer,Delhi,20

7,Vijay,18000,Developer,Bangalore,10

1. Sort by Id
2. Sort by city
3. Sort by City and sub sort by DeptId

Note : column name not sort(ignore).

GREP Commands GREP Global Regular Express Print

Grep command actually search then the content in file base upon the pattern.

The grep command mainly divided into three parts.

1st grep command followed by pattern to search in file and then filename or contents.

grep 'e' grepdemo.txt : display the line where e character present

grep –i 'e' grepdemo.txt : ignore case sensitive

grep -c -i 'E' grepdemo.txt : it display the number of line where E character present.

grep -n -i 'e' grepdemo.txt : it display the line which contains e character as well as it display the line numbers.

Please work more GREP Commands

SED : The SED command Unix stands for stream editing commands.

Using SED command we can modify the contents of the file.

SED command in Unix basically use search and replace the text or contents from a file.

Pipe commands

Pip e command is use to combine more than command

So first command execute it provide the output and that is input for another command.

echo “Welcome to Unix Training “ |

SED command

1. Read a line from input stream
2. Execute the command on a line
3. Display the result on output stream.

In SED command we use s and g

S : substitution

G : means many occurrence.

sed s/Raj/'Raj Deep'/g seddemo.txt

sed s/EE/i/ seddemo.txt

sed s/ee/i/g seddemo.txt

sed s/ee/i/ seddemo.txt

sed '2 s/R/r/g' seddemo.txt

sed -i s/Raj/'Raj Deep'/gi seddemo.txt : this command search, replace and update in same file.

SED commands