

Lecture 17: More Commands on files

.uniq

Display the duplicate and unique lines of a file

```
$uniq [option..] <filename>
```

options:

-u display only the unique lines

-d display only the duplicate lines

-c displays all lines, each preceded by a count of the records

The **uniq** command compares the adjacent lines in a sorted file and displays lines that are unique or the lines that are repeated in a file and displays the result on the terminal. It is essential that the file must be sorted prior to using the **uniq** command.

The command line format is:

```
$ uniq [option] <filename> <Enter>
```

Examples:The file **emp.dat** contains the following data:

EO01	SHAGUFA	CO05	MKT	10,000
EO02	SHEKHAR	CO01	MKT	15,000

EO04	ANURAG	AO01	PROD	15,000
EO04	ANURAG	AO01	PROD	15,000
EO05	MADHU	AO02	ADMN	12,000
EO05	MADHU	AO02	ADMN	12,000

here the 4th and 5th records are repeated.

To suppress the duplicate record, the command used:

```
$ uniq emp.dat <Enter>
```

The above command would display only the unique lines of the file, thus having just one entry for the 4th and 5th record.

To display the duplicate lines from the file emp.dat use:

```
$ uniq -d emp.dat <Enter>
```

To display only the number of occurrences of each lines or records use:

```
$ uniq -c emp.dat <Enter>
```

Sending and Receiving mails

mail command

```
$mail [options] login-name
```

options:

- q returns the undeleted messages to the mail file, and exit mail program.
- P displays the previous message again
- S saves the message in a file

The **UNIX** system provides several utilities that enable users to communicate with each other working on the same system.

The **write** command is used to send messages directly between user terminals of a user already logged in.

The mail command is used to send messages to a user's mailbox and used to retrieve messages from the mailbox. Using this command the messages can also be sent to a user who has not logged in.

At the time of log in, the system will inform the user about the messages available in the mailbox, by displaying the message "**you have mail**" before the shell prompt appears.

To send the mail to a user, we need to know the user's login name.

To send a message to the user, say, **neeraj** the command used is:

```
$ mail neeraj  
Subject: Hi  
Hi! How's work  
Have a nice day  
Good -bye
```

<ctrl -d>

The mail command without any arguments will display the mail available in the mailbox. An "&" (ampersand) prompt appears, where the following commands can be given:

- p** **to display the previous message.**
- s** **to save the message in a file.**
- q** **to quit the mail command and get back to the system prompt.**

Fill in the blanks:

1. The three types of users are _____, _____ and _____.
2. _____ command is used to create duplicate copies of ordinary file.
3. _____ establishes an additional link to a file.
4. _____ command moves the contents of one file to another.
5. The _____ command forces the removal of files that do not have write permission.
6. The _____ command generates a three-columnar report containing the differences in the file.

II. State true or false:

1. Assigning group permissions help all the users to share information_
2. With the mv command, the destination file is overwritten, if it already exists.
3. You need to be the Super user to change the access permissions of a file not belonging to you.
4. The cp and the mv commands are identical.
5. The three different types of access permission are read, write and execute.
6. If two files are linked both the files have the same inode number & the same permissions.

Review Questions:

1. Copy the file **first.unix** in your home directory to **first.unics**.
2. List the contents of **first.unix** and **first.unics** with a single command.
3. Create a new directory under the **temp** directory.
4. From your home directory, copy all the files to the directory created under the temp sub directory.
5. What commands would you give to copy all files from the directory /usr/username/progfiles to the directory temp1 in your home directory
6. Move the file **second.unix** to the directory /usr/username/progfile
7. Create the links for the files **firstunix second.unix** and **third.unix** in the directory and observe the changes using ls.
8. Remove the file called **second.unix** from the home directory, and observe the changes in the number of links, by using the long listing command
9. Change your directory to temp and issue the command **rm ***. What do you observe?
10. Move all the files whose name ends with a 'c' and '0' to the HOME directory.
11. Copy all the files that end with a '**UNIX**' to the temp directory.
12. Issuing a single command, remove all the files from the directory temp and the directory itself. .