

LAB 4

Course Code: CSC 2209

Course Title: Operating Systems



Dept. of Computer Science
Faculty of Science and Technology

Lecturer No:	04	Week No:	04	Semester:	
Lecturer:	<i>Name & email</i>				

Lecture Outline



1. Man and help
2. Count words, lines and bytes
3. Line Number
4. Sort Command
5. head Command
6. tail Command
7. Cut Command
8. Paste Command

Man and help

- ❑ **man & --help** — **To know more about a command** and how to use it, use the **man** command. It shows the manual pages of the command. **For example**, “**man cd**” shows the manual pages of the **cd** command. Typing in the command name and the argument helps it show which ways the command can be used (e.g., **cd --help**).
- ❑ For example, “**man cat**” shows the **manual pages** of the **cat** command.

Count words, lines and bytes (wc)

- i. To show number of **words**, **lines** and **bytes**

Syntax: `wc filename`

- ii. To display the **number of characters** in a file

Syntax: `$ wc -c filename`

Example: `$ wc -c ex1`

- iii. To display the **number of lines**

Syntax: `$ wc -l filename`

Example: `$ wc -l ex3`

Line Number

- i. To display number of lines with numbers

Syntax: `$ nl filename`

Example: `$ nl ex1`

- ii. To increment the line number by 5

Syntax: `$ nl -i5 filename`

Example: `$ nl -i5 ex3`

Sort command

This command helps in sorting out the contents of a file alphabetically.

i. To **reverse and sort** the content of file

Syntax: `$ sort -r filename`

Example: `$ sort -r ex1`

ii. To sort the content of the file

Syntax: `$ sort filename`

Example: `$ sort ex1`

iii. To **sort and remove the duplicate**

Syntax: `$ sort -u filename`

Example: `$ sort -u ex1`

Exercise

- ❑ The “sort” command on Solaris has a “-k” switch for sorting by a particular field. For example, “**sort -k 2**” **will sort by the second field on each line of input**. Parts of fields can be further specified with “-k n.m“, says the man page.
- ❑ For example, “**sort -k 2.3**” should sort by the **second field**, starting with the **third character** in that field.

head command

i. To display first 10 lines

Syntax: `$ head filename`

ii. To display first 6 characters

Syntax: `$ head -6c filename`

iii. To display 5 lines from 2 files

Syntax: `$ head -5 file1 file2`

tail command

- ❑ To display last 10 lines

Syntax: `$ tail filename`

Example: `$ tail ex3`

Cut Command

- ❑ The cut command enables you to extract a column of information from a file. To specify the column that is to be **extracted**, we use the **-c parameter**. This is then followed by the column number. To extract more than one column, a comma separated list can be passed. **Fields** may also be specified by **using the -f**. A delimiter may also be specified with the **-d parameter**. The default **delimiter** is the tab character unless specified.
- ❑ **cat** cutfile.txt
harry,25,16200
gill,46,17500
bill,45,20000
john,43,100000
barry,27,42000
paul,18,26500

Cut Command (cont'd)

❏ **cut -d, -f 1,3 cutfile.txt**

harry,16200

gill,17500

bill,20000

john,100000

barry,42000

paul,26500

Exercise

- ☐ **cut -c 1-4 cutfile.txt**
- ☐ Cutting the first 4 letters from the file "cutfile.txt".

Paste Command Examples

- ❑ The **paste** command is useful for merging files together. The first line of each file is joined separated by a Tab character. It is possible to specify a different delimiter with the **-d** parameter.
- ❑

```
cat > pastefile1.txt
```

One'

Two

Three

```
cat > pastefile2.txt
```

Four

Five

Six
- ❑

```
paste pastefile1.txt pastefile2.txt
```



Books

- ❑ Unix Shell Programming
 - ❑ Written by Yashavant P. Kanetkar