

LAB 2

Course Code: CSC 2209

Course Title: Operating Systems



Dept. of Computer Science
Faculty of Science and Technology

Lecturer No:	02	Week No:	02	Semester:	
Lecturer:	<i>Name & email</i>				

Lecture Outline



1. cat Command
2. Hidden Files
3. Showing Contents of a File
4. How to Append Files
5. How to Concatenate Files
6. cp Command
7. mv Command
8. rm Command

cat command

- ❑ `cat > test.txt`

This is a test.

I like Unix operating systems.

- ❑ To save the changes press CTRL-d i.e. press and hold CTRL and press d. Create another text file called bar.txt as follows:

Exercise

In dir1, create a text file called ‘file1.txt’, with the text: this is my first text file

```
$ mkdir dir1
```

```
$ cd dir1
```

```
$ echo this is my first file > file1.txt
```

Hidden Files

- ❑ The special . and .. directories don't show up when you do ls, they are **hidden files**
- ❑ **Similarly we have hidden files**
Simple rule: files whose names start with . are considered 'hidden'
Make ls display all files, even the hidden ones, by giving it the -a (all) option:
\$ ls -a
... .bashrc .profile report.doc
- ❑ Hidden files are often **used for configuration files**
- ❑ Usually found in a **user's home directory**
- ❑ You can still read hidden files — they just don't get listed by ls by default

cat command to show content of a file

- ❑ It's used to print the contents of a file to the screen(stdout more precisely), really useful when you want to have a quick look on contents of a file.
- ❑ As example, use **cat a_text_file** to get the inside contents of that file in your screen.

cat command to append

- ☐ Use the (>>) operator to append the contents of file1.txt to file2.txt :
- ☐ `cat file1.txt >> file2.txt`

Create, View and Append file

- ☐ **To create a file**
Syntax: `$ cat>filename`
Example: `$ cat>ex1`
- ☐ **To view the content of the file**
Syntax: `$ cat filename`
Example: `$ cat ex1`
- ☐ **To append some details with the existing details in the file**
Syntax: `$ cat>>filename`
Example: `$ cat>>ex1`

Concatenate multiple files

- ❑ **To concatenate multiple files**
Syntax: `$ cat file1 file2 >> file3`
Example: `$ cat computer compiler >> world`

cp command

- ❑ **cp** , You can copy files and directories with this command. Typical usage is like **cp file_a file_1_copy** or **cp directory_a dir_a_copy**
 - ❑ **Syntax:** \$ cp source destination
Example: \$ cp ex1 ex2
- ❑ Also don't forget to use proper path when you're coping something to different location.

mv command

- ❑ The **mv** command is used to **move or rename** directories and files.
- ❑ To rename a file use **mv old_name new_name**
Syntax: \$ mv oldfile newfile
Example: \$ mv ex1 ex3

rm command

- ☐ The rm command is used to remove files or directory.
- ☐ **To delete a file**
Syntax: `$ rm filename`
Example: `$ rm ex1`
- ☐ **To delete all files**
Syntax: `$ rm *`
- ☐ `rm -d dir_name` (empty directory remove)
- ☐ `rm -r /tmp/backup` to remove everything that folder.
- ☐ Of course you've to be careful before removing anything.

Create, change and remove a directory

- ☐ **To create a directory**

Syntax: `$ mkdir dirname`

- ☐ **To change the name of the directory (!!)**

Syntax: `$ cd dirname (!! mv old_name new_name)`

- ☐ **To remove the directory**

Syntax: `$ rmdir dirname`

Example: `$ rmdir flower`

- ☐ **To delete all directories** The `-p` option can delete directory and its subdirectories/sub-folders:

Syntax: `$ rmdir -p dir1/dir2/dir3`

Exercises

In AIUB, create a text file called 'file1.txt', with the text: "this is my first text file
Second line of my first text file"
Create another file name file2.txt with the text "second file_yourname"
Copy file1.txt to file2.txt
Rename file2.txt to your_name.txt
Delete file2.txt
Delete your_name.txt
Delete AIUB



Books

❏ Unix Shell Programming

❏ Written by Yashavant P. Kanetkar

1. Create a text file called `file1.txt` with the specified text:

```
echo -e "this is my first text file\nSecond line of my first text file" > file1.txt
```

2. Create another file named `file2.txt` with the text "second file_yourname":

```
echo "second file_yourname" > file2.txt
```

3. Copy `file1.txt` to `file2.txt`:

```
cp file1.txt file2.txt
```

4. Rename `file2.txt` to `your_name.txt` (replace `your_name` with your actual name):

```
mv file2.txt your_name.txt
```

5. Delete `file2.txt` (if it still exists):

```
rm file2.txt
```

6. Delete `your_name.txt`:

```
rm your_name.txt
```

7. Delete the directory `AIUB`:

```
rm -r AIUB
```