

System Administration and maintenance

25 = Internal (weekly quiz+ viva)

50 = Practical exam

25 = theory exam

An Operating system is the software that manages the computer's hardware and provides a convenient and safe environment for running programs. It acts as an interface between programs and the hardware.

Online platform for Linux practical

<https://cocalc.com/projects/465245fb-9304-44f4-b16f-91266506b22c/files/Welcome%20to%20CoCalc.term?session=default>

>\$ tput clear :- this is command with argument (without argument no use)

>\$ date – display current date

>\$ cal –this command will display current month calendar (this work with argument without argument)

>\$cal 1 2021

>\$ who – display who r the users working with current system

>\$ who

Kumar	console	may 9 09:30	(:0)
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Ram	pts/4	may 9 09:30	(:0.0)
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>\$ ps command to view all process that user responsible to create

>\$ ls:- list of files

>\$ ls chap* - files which start from chap

>\$ ls -l chap* :-details about files argument begin with - (hyphen) known as option

```
>$ echo "this is demo file"
```

```
>$ x=5
```

```
>$echo $x
```

Create file with touch

```
>$touch test.txt
```

Cat Command

cat command (short for “**concatenate** “) is allows us to create single or multiple files, view contain of file, concatenate files and redirect output in terminal or files.

basic syntax:

```
$ cat filename
```

```
$ cat > filename
```

```
$ cat [options] filename
```

- 1) To view a file using cat command,

```
$ cat filename
```

- 2) You can create a new file with the name file1.txt using the following cat command and you can type the text you want to insert in the file. Make sure you type ‘**Ctrl-d**’ at the end to save the file.

```
$ cat > file1.txt
```

```
This is my new file in Linux.
```

```
The cat command is very useful.
```

```
Thanks
```

display the contents of the file file1.txt

```
$ cat file1.txt
```

```
Output: This is my new file in Linux.
```

```
The cat command is very useful.
```

- 3) To create two sample files and you need to concatenate them, use the following command.

```
$ cat smaple1.txt
```

```
This is my first sample text file
```

```
$ cat sample2.txt
```

```
This is my second sample text file
```

- 4) concatenate these two files and can save to another file named sample3.txt

```
$ cat sample1.txt sample2.txt > sample3.txt
```

```
$ cat sample3.txt
```

```
Output: This is my first sample text file
```

```
This is my second sample text file
```

- 5) To display contents of all txt files,

```
$ cat *.txt
```

```
This is my first sample text file
```

```
This is my second sample text file
```

- 6) To display the contents of a file with line number,

```
$ cat -n file1.txt
```

- 7) To copy the content of one file to another file, you can use the greater than '>' symbol

```
$ cat file2.txt > file1.txt
```

- 8) To append the contents of one file to another, you can use the double greater than '>>' symbol

```
$ cat sample1.txt >> sample2.txt
```

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