

Lab3

Display content of the files. Pipeline.

Read carefully the instructions before performing!!!

Submission in pairs : 02/12/24 for the groups of Monday
05/12/24 for the groups of Thursday

- To learn how to see (to display) the files.
- Copy and rename the file.
- The first using of the pipeline concept.

Linux Commands

1. Commands **cat**, **more** = display the contain of the file.

cat file_name

more file1 file2 file3

2. Command **cp** = Copy file 1 into file 2

Example:

```
>ls
```

```
foo1.c
```

```
> cp foo1.c foo2.c
```

```
>ls
```

```
foo1.c foo2.c
```

```
> cp -r dir1 dir2 = Copy recursively
```

3. Command **mv** = Copy file 1 into file 2= Rename file1

Example:

```
>ls
```

foo1.c

> **mv** foo1.c foo2.c

>ls

foo2.c

4. Wildcards

4.1 * = matches zero or more character

Examples:

>ls *.txt = show all the files which finish with .text

>ls a* = show all the files which start with the letter a

>ls a*.txt = files which start with a and end with .text

4.2 ? = matches exactly one character

Examples:

>ls ?.txt = show all the files which start with any character and finish with .text

>ls a???.txt = show all the files which start with a , then any 3 characters and finish with .txt

> ls a??.*txt = show all the files which start with a, then any 2 characters, then ., then any text and finally it finishes with txt

4.3 [] - A character class (exactly 1 character from the range)

Examples:

> ls *.*[aeiou] = show all the files which end with a, e, i, o or u. Like foo.a or boo.u

>ls ca[nt] = show can or cat

4.4 Ranges

[a-g]* = Matches all files that start with a,c,..g

[3-6]* = Matches all files that start with 3,4,5 or 6

4.5 Special symbols - use the symbol \

> ls *\? = Show all the files which finish with ?

5. head file_name - prints the first lines (default 10) of the file file_name

head -n file_name - prints 3 first lines of file_name

6. tail file_name - prints the last lines (default 10) of the file file_name

tail -n file_name - prints n last lines of file_name

tail +n file_name- prints all the lines starting with the n-th line of the file_name

7. pipeline |

Pipeline is a mechanism for connecting the output of one command to the input of another command

Example1: > cat file_name | head -3 | tail +2

Example2:

>cat foo1.txt

line 1

line 2

line 3

line 4

> cat foo1.txt| head -3 | tail +2

line 2

line 3

Procedures

1. Create a new directory Lab3.
2. In Lab3 create a new directory TryDir.
3. In TryDir create 3 files foo1.dat, foo2.g, boo3.gt6, boo.
4. Open the file foo1.dat (use pico) and write here your name, and id.
5. Open the file foo2.g and write the name of your best friend.
6. Display foo1.dat using **cat** and **more**.
7. Display both foo1.dat and foo2.g (Use, for example **cat** with 2 parameters)
8. Show the names of the files starting with the letter **f**.
9. Show the names of the files which contain the letter **g**.
10. Show the names of the files which contain a number.

12. Make a **copy** of the file foo1.dat and call it newFoo.
13. Display the content of the file newFoo. Is it identical to foo1.dat?
14. **Rename** the file newFoo to be Foo2.
15. **Move** the file Foo2 to the directory Lab3.
16. Write in **lab3.sh** all the above (1-15) commands.
17. Show the first 5 lines of lab3.sh.
18. Show the last 5 lines of lab3.sh.
19. Show the lines 5-7 of lab3.sh (use cat, head, tail and pipeline).
20. Display the content of the files which start with the letter **f** and then show the second line only of the result.

Submission:

Submit the file **lab3.sh** and **results of the runs** of the commands 1-20 in file **answers.txt**.

Note:

Create one compressed file named **Linux_Lab3_id1_id2.tar**, where id1 and id2 must be changed to the id numbers of the two partners.

This file will include the lab3.sh file and additional text file named **answers.txt** with the answers to the questions.

To create such a file in Linux command line write:

```
$ tar -cvf Linux_Lab3_id1_id2.tar lab3.sh answers.txt
```

Submit **only** the file **Linux_Lab3_id1_id2.tar** in Moodle and only by **one** of the partners.