

UF3

Sistemes Operatius

LLIURES

Intèrpret de comandes

SHELL

UF3. Sintaxi

Ordre:

command -option argument

Indicador (*Prompt*):

```
usuari@equip:~$
```

```
infom@209-1:~$ ls -l /home/infom
lrwxrwxrwx  1 infom infom 1024 2019-3-14 test -> /home/infom/Desktop/test
drwxrwxrwx  1 infom infom 2048 2019-3-14 Desktop
...
infom@209-1:~$
```

UF3. Caràcters especials

Special characters	Explanation
.	Current or present directory (directori de treball)
..	Parent directory
/	Root directory (directori arrel)
~	Home directory (directori d'usuari): <code>/home/infom</code>
*, ?, !	Wildcards
	Pipe
&	Background
\$	Log as user
#	Log as root

UF3. man

- Per accedir **man** `<command>`.
- `AvPg`, `RePg`, `Ini` i `Fi` per navegar.
- Per buscar una paraula premeu `/`, escriu la paraula i prémer `return`.
- `n` continuar la cerca fins la següent coincidència.
- `q` per finalitzar la visualització.
- `[]` indica que els paràmetres són opcionals.

UF3. Comandes bàsiques

Command	Result
<code>pwd</code>	Display the present working directory
<code>cd ~</code> or <code>cd</code>	Change to your home directory
<code>cd ..</code>	Change to parent directory
<code>cd -</code>	Change to previous directory
<code>cd /</code>	Change your current directory to the root (/) directory
<code>tree</code>	Display a tree view of the filesystem
<code>ls</code>	List the contents of the present working directory
<code>ls -a</code>	List all files, including hidden files and directories (started with <code>.</code>)
<code>clear</code>	Clear the terminal screen
<code>exit</code>	Cause normal process termination

UF3. Més comandes bàsiques

Command	Result
<code>history</code>	Consultar l'històric de comandes
<code>touch</code>	Change file timestamps or create an empty file.
<code>mount</code>	Mount a filesystem
<code>locate</code>	List files in databases that match a pattern
<code>fdisk</code>	Manipulate disk partition table
<code>sudo</code>	Execute a command as another user

UF3. Moving, Renaming or Removing

Command	Result
<code>cp</code>	Copy a file or directory
<code>mv</code>	<ul style="list-style-type: none">• Rename a file or directory• Move to another directory
<code>rm</code>	Remove a file
<code>rm -f</code>	Forcefully remove a file
<code>rm -i</code>	Interactively remove a file
<code>rmdir</code>	Remove an empty directory
<code>rm -rf</code>	Forcefully remove a directory recursively
<code>ln -s</code>	Soft (Symbolic) Links

UF3. Ruta relativa i absoluta

Dues maneres d'invocar un nom de fitxer o directori:

- Ruta absoluta: començant des del directori arrel / fins al fitxer, sempre comença amb /.
- Ruta relativa: comença des del directori de treball (`pwd`) i **mai** comença amb /.

Per exemple, si estàs a `/home/infom` i vols canviar a `/usr/bin`, les dues maneres de fer-ho:

- Ruta absoluta \$ `cd /usr/bin`
- Ruta relativa \$ `cd ../../usr/bin`

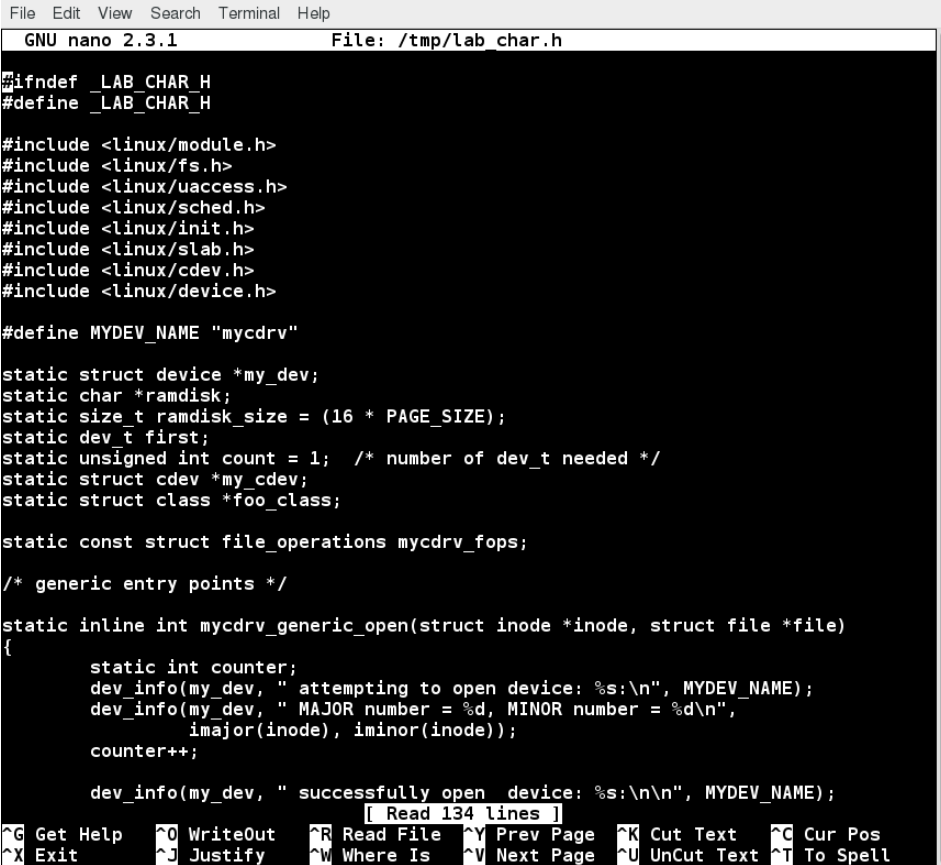
UF3. nano

Per crear un document escriu:

```
$ nano <filename>
```

A la part inferior de la pantalla hi ha el menú:

- CTRL-G
Mostra la pantalla d'ajuda
- CTRL-O
Guarda
- CTRL-X
Sortir
- CTRL-R
Inserir el contingut d'un altre fitxer
- CTRL-C
Cancelar



```
File Edit View Search Terminal Help
GNU nano 2.3.1 File: /tmp/lab_char.h

#ifndef _LAB_CHAR_H
#define _LAB_CHAR_H

#include <linux/module.h>
#include <linux/fs.h>
#include <linux/uaccess.h>
#include <linux/sched.h>
#include <linux/init.h>
#include <linux/slab.h>
#include <linux/cdev.h>
#include <linux/device.h>

#define MYDEV_NAME "mycdrv"

static struct device *my_dev;
static char *ramdisk;
static size_t ramdisk_size = (16 * PAGE_SIZE);
static dev_t first;
static unsigned int count = 1; /* number of dev_t needed */
static struct cdev *my_cdev;
static struct class *foo_class;

static const struct file_operations mycdrv_fops;

/* generic entry points */

static inline int mycdrv_generic_open(struct inode *inode, struct file *file)
{
    static int counter;
    dev_info(my_dev, " attempting to open device: %s:\n", MYDEV_NAME);
    dev_info(my_dev, " MAJOR number = %d, MINOR number = %d\n",
             imajor(inode), iminor(inode));
    counter++;

    dev_info(my_dev, " successfully open device: %s:\n\n", MYDEV_NAME);
}

[ Read 134 lines ]

^G Get Help    ^O WriteOut   ^R Read File   ^Y Prev Page  ^K Cut Text    ^C Cur Pos
^X Exit        ^J Justify    ^W Where Is   ^V Next Page  ^U UnCut Text ^T To Spell
```

UF3. File Ownership

Command	Usage
chown	Used to change user ownership of a file or directory
chgrp	Used to change group ownership
chmod	Used to change the permissions on the file, which can be done separately for owner, group and the rest of the world (other)

UF3. File Permissions

Three group of owners: user/owner (u), group (g), and others (o).

Three kinds of permissions:

- Symbolic notation: read (r), write (w), execute (x).

```
$ ls -l somefile
```

```
-rw-rw-r- 1 infom infom 1000 Mar 18 15:04 somefile
```

```
$ chmod u+x,g-w somefile
```

```
$ ls -l somefile
```

```
-rwxr--r-x 1 infom infom 1000 Mar 18 15:04 somefile
```

Another kind of syntax

- Octal notation: read (4), write (2), execute (1)

Thus, 7 means read/write/execute, 6 means read/write, and 5 means read/execute.

```
$ chmod 755 somefile
```

```
$ ls -l somefile
```

```
-rwxr--x-x 1 infom infom 1000 Mar 18 15:04 somefile
```

Link to web resource [A Unix and Linux Permissions](#)