Procesos

1. Visualitza i mostra la llista de processos del sistema que s'estàn executant.

El comando ps aux monitorea los procesos que se ejecutan

-								
alumne	13880	0.0	1.8	2596512	142392 ?	sl	11:23	0:06 /usr/lib/fire
root	14145	0.0	0.0	0	0 ?	I	11:32	0:02 [kworker/1:2-
alumne	14932	0.0	0.0	14092	5692 pts/2	2 Ss+	11:50	0:00 /usr/bin/bash
root	15277	0.0	0.0	0	0 ?	I	11:51	0:01 [kworker/3:1-
root	15279	0.0	0.0	0	0 ?	I	11:51	0:00 [kworker/0:2-
alumne	15799	0.0	0.0	14072	5344 pts/3	Ss+	12:02	0:00 /usr/bin/bash
root	15874	0.0	0.0	0	0 ?	I	12:02	0:01 [kworker/u8:0
alumne	16133	0.8	1.6	2471584	132640 ?	sl	12:06	0:36 /usr/lib/fire
root	19036	0.0	0.0	0	0 ?	I	12:29	0:00 [kworker/2:2-
alumne	20013	0.0	0.0	14092	5664 pts/4	4 Ss	12:46	0:00 /usr/bin/bash
alumne	20070	0.0	0.1	21940	9112 pts/4	4 S+	12:47	0:00 /bin/python3
root	22508	0.0	0.0	0	0 ?	I	13:07	0:00 [kworker/u8:4
root	22516	0.0	0.0	0	0 ?	I	13:07	0:00 [kworker/0:1-
alumne	22723	0.3	0.5	557580	45012 ?	sl	13:09	0:02 mate-terminal
alumne	22747	0.0	0.0	14068	5712 pts/	5 Ss+	13:09	0:00 bash
alumne	22769	0.0	1.1	2428508	88100 ?	sl	13:09	0:00 /usr/lib/fire
alumne	22801	0.0	0.7	2415300	60684 ?	sl	13:10	0:00 /usr/lib/fire
alumne	22831	0.0	0.7	2415300	60548 ?	sl	13:10	0:00 /usr/lib/fire
root	22913	0.0	0.0	0	0 ?	I	13:11	0:00 [kworker/2:3-
root	22942	0.0	0.0	0	0 ?	I	13:12	0:00 [kworker/u8:1
alumne	23164	0.0	0.0	164284	4860 ?	sl	13:13	0:00 /usr/lib/libr
alumne	23202	3.4	4.1	1227508	325952 ?	sl	13:13	0:12 /usr/lib/libr
root	23231	0.0	0.0	0	0 ?	I	13:13	0:00 [kworker/0:0-
root	23232	0.0	0.0	0	0 ?	I	13:13	0:00 [kworker/3:2-
root	23365	0.0	0.0	0	0 ?	I	13:17	0:00 [kworker/u8:2
root	23417	0.0	0.0	0	0 ?	I	13:18	0:00 [kworker/0:3]
root	23418	0.0	0.0	0	0 ?	I	13:18	0:00 [kworker/2:0-
root	23441	0.2	0.0	0	0 ?	I	13:18	0:00 [kworker/1:1-
root	23446	0.0	0.0	0	0 ?	I	13:18	0:00 [kworker/3:0-
alumne	23457	0.2	0.7	2414032	60396 ?	sl	13:18	0:00 /usr/lib/fire
alumne	23482	0.0	0.0	14068	5496 pts/6	5 Ss	13:18	0:00 bash
alumne	23496	0.0	0.0	15360	1648 pts/	5 R+	13:19	0:00 ps aux
alumne@A50I	PC15:~\$	ps a	ИX					

2. Llança alguns programes com per exemple: Firefox, editor de text

Al abrir chromium aparece como proceso en ejecución

```
root 23440 0.0 0 0 7 I 13:18 8:00 [kworker/3:1-events]
root 23440 0.0 0 0 7 I 13:18 8:00 [kworker/3:1-events]
root 23440 0.0 0 0 7 I 13:18 8:00 [kworker/3:0-events]
root 23440 0.0 0 0 7 I 13:18 8:00 [kworker/3:0-events]
root 23440 0.0 0 0 7 I 13:18 8:00 [kworker/3:0-events]
root 23450 0.0 0 0 7 2414032 60396 7 St 13:18 8:00 /usr/lib/friefox/firefox-bin-contentproc -childID 56 -isForBrowser -prefsLen 28964 -prefMapSize 230762 -jsInitLen 246560 -parentBuildID 2023
root 23490 3.0 0 0 14608 5496 pts/6 5 St 13:18 8:00 /usr/lib/friefox/firefox/firefox-bin-contentproc -childID 56 -isForBrowser -prefsLen 28964 -prefMapSize 230762 -jsInitLen 246560 -parentBuildID 2023
root 23490 3.0 0 0 0 335367608 3376 7 St 13:19 8:00 /usr/lib/fromium/chromium/chromium-crashpad handler -monitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-amonitor-self-
```

3. Torna a visualitzar la llista de processos en execució i mostra alguna informació extra com pot ser: hora d'inici, ús de memòria, estat d'execució, propietari i altres detalls que consideres interessants.

Comando ps -ef para ver más información de los procesos

Hora d'inici: 13:19 Ús de memòria: 2.6

PID:23499 %CPU: 3.2 Stat: SLl 4. Mostra la jerarquía dels processos en execució mitjançant una estructura d'arbre.

El comando 'pstree' muestra la estructura en arbol de procesos

```
A50PC15:~$ pstree
|---ModemManager----2*[{ModemManager}]
systemd-
                         -NetworkManager——2*[{NetworkManager}]
-accounts-daemon——2*[{accounts-daemon}]
                         -acpid
                          -agetty
                         -atop
                          -atopacctd
                          -avahi-daemon---avahi-daemon
                         -bash
                        —blkmapd
                         -containerd---8*[{containerd}]
                         -cups-browsed---2*[{cups-browsed}]
                         -cupsd
                         -dbus-daemon
                        -dockerd---12*[{dockerd}]
-gnome-keyring-d---3*[{gnome-keyring-d}]
-irqbalance----{irqbalance}
                         -2*[kerneloops]
                       —lightdm——Xorg——10
—lightdm——
                                                                      -10*[{Xorg}]
                                                                                                                     —agent——2*[{agent}]
—applet.py
—blueman-applet——3*
—caja——3*[{caja}]
                                                                              -mate-session-
                                                                                                                                                                   -3*[{blueman-applet}]
                                                                                                                      -evolution-alarm---5*[{evo
-marco---3*[{marco}]
-mate-panel---firefox-bin-
                                                                                                                                                                                           __2*[Isolated Web Co—_19*[{Isolated Web Co}]]
_2*[Isolated Web Co—_18*[{Isolated Web Co}]]
_1solated Web Co—_21*[{Isolated Web Co}]]
_Privileged Cont—_18*[{Privileged Cont}]
_RDD Process—_2*[{RDD Process}]
_Socket Process—_4*[{Socket Process}]
_Utility Process—_3*[{Utility Process}]
_2*[Web Content—_14*[{Web Content}]]
_Web Content—_15*[{Web Content}]
_WebExtensions—_18*[{WebExtensions}]
_file:// Content—_19*[{file:// Content}]
_154*[{firefox-bin}]
el}]
                                                                                                                     -3*[{mate-panel}]
-mate-power-mana-3*[{mate-power-mana}]
-mate-screensave-3*[{mate-screensave}]
-mate-settings-d-4*[{mate-settings-d}]
-mate-volume-con-2*[{mate-volume-con}]
-nm-applet-3*[{nm-2*[{polkit-mate-aut}]}
```

5. Visualitza i mostra totes les tasques del sistema amb el comandament top.

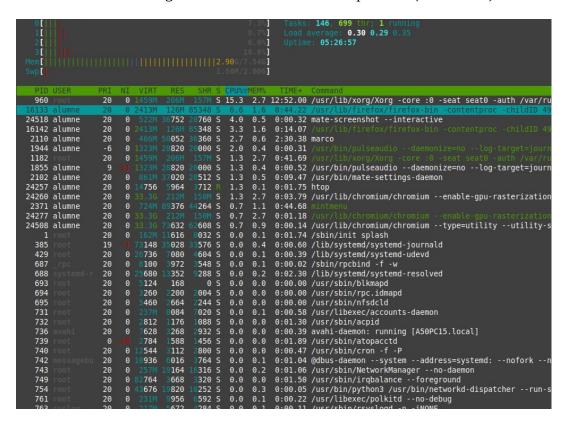
El comando top permite ver las tareas del sistema en tiempo real.

```
top - 13:29:29 up 5:22, 1 user, load average: 0,30, 0,29, 0,37

Tareas: 262 total, 1 ejecutar, 260 hibernar, 0 detener, 1 zombie
%Cpu(s): 2,6 us, 1,1 sy, 0,0 ni, 96,2 id, 0,0 wa, 0,0 hi, 0,1 si, 0,0 st
MiB Mem : 7724,8 total, 1865,6 libre, 1690,8 usado, 4168,3 búfer/caché
MiB Intercambio: 2048,0 total, 2046,5 libre, 1,5 usado. 4969,0 dispon Mem
```

IIID IIIC	ci cumbio.	-	,	, cocac,		J CIDIC,		., . use		o, o dispon riem
PID	USUARIO	PR	NI	VIRT	RES	SHR S	%CPU	%MEM	HORA+	ORDEN
960	root	20	0	1459868	208604	159064 S	7,6	2,6	12:37.42	Xorg
24101	alumne	20	0	534920	36664	28676 S		0,5		mate-screenshot
2110	alumne	20	0	477752	50052	36360 S		0,6	2:28.46	marco
2102	alumne	20	0	882280	37020	28512 S	0,7	0,5	0:09.25	mate-settings-d
14145	root	20	0	0	Θ	0 I		0,0		kworker/1:2-events
22	root	20	0	0	Θ	0 S	0,3	0,0	0:30.12	ksoftirqd/1
131	root	0	-20	0	0	0 I		0,0	0:23.86	kworker/u9:0-i915_flip
197	root	0	-20	0	Θ	0 I	0,3	0,0		kworker/2:1H-events_highpri
889	root	20	0	1357300	42932	31412 S	0,3	0,5		containerd
2158	alumne	20	0	549560	38368	29132 S	0,3	0,5	0:24.92	clock-applet
16133	alumne	20	0	2471196	129612	85032 S		1,6	0:36.73	Isolated Web Co
	alumne	20	0	559116	45968	34144 S		0,6		mate-terminal
23418	root	20	0	0	0	0 I		0,0	0:00.30	kworker/2:0-events
24075		20	0	0	0	0 I		0,0	0:00.06	kworker/u8:4-events_unbound
	alumne	20	Θ	15992	4244	3352 R		0,1	0:00.08	
1	root	20	0	166476	11616	8032 S		0,1		systemd
	root	20	0	0	Θ	0 S		0,0		kthreadd
	root		-20	0	Θ	0 I		0,0	0:00.00	
	root		-20	0	Θ	0 I		0,0		rcu_par_gp
	root		-20	0	0	0 I		0,0		slub_flushwq
	root		-20	0	0	0 I		0,0	0:00.00	
	root		-20	0	0	0 I		0,0		kworker/0:0H-events_highpri
	root		-20	0	0	0 I		0,0		mm_percpu_wq
	root	20	0	0	0	0 S		0,0		rcu_tasks_rude_
	root	20	0	0	0	0 S		0,0		rcu_tasks_trace
	root	20	0	0	0	0 S		0,0		ksoftirqd/0
	root	20	0	0	0	0 I		0,0		rcu_sched
	root root	rt -51	0 0	9 9	0 0	0 S 0 S		0,0 0,0		migration/0 idle inject/0
	root	20	0	0	9	0 S				cpuhp/0
	root	20	0	9	0	0 S		0,0 0,0		cpuhp/1
	root	-51	0	0	0	0 S		0,0		idle_inject/1
	root	rt	0	0	0	0 S		0,0		migration/1
	root		-20	0	9	0 J		0,0		kworker/1:0H-events highpri
	root	20	0	Ö	0	0 S	- / -	0,0		cpuhp/2
	root	-51	Õ	0	Ö	0 S		0,0		idle inject/2
	root	rt	Õ	0	o O	0 S		0,0		migration/2
	root	20	Õ	Ö	0	0 S		0,0		ksoftirqd/2
	root		-20	0	9	0 I		0,0		kworker/2:0H-events highpri
	root	20	0	0	0	0 S		0,0		cpuhp/3
	root	-51	0	0	0	0 S		0,0		idle inject/3
	root	rt	0	0	0	0 S		0,0		migration/3
	root	20	0	0	0	0 S		0,0		ksoftirqd/3
36			20	_	_	^ +	2,0	0 0	0.00.00	lusadore (2. Oll rosado biologo

6. Mostra els processos de forma interactiva (usa el comandament htop). Selecciona el procés relacionat amb el navegador firefox i atura'l amb l'opció kill (SIGTERM).



Con el comando "kill" + "PID del proceso" cerramos el proceso seleccionado

```
alumne@A50PC15:~$ kill 24292
alumne@A50PC15:~$
```