

An example is as follows. Here, `comm` stands for `COMMAND` and `pcpu` is percent of CPU usage:

```
$ ps -eo comm,pcpu | head
COMMAND      %CPU
init          0.0
kthreadd      0.0
migration/0   0.0
ksoftirqd/0   0.0
watchdog/0    0.0
events/0      0.0
cpuset        0.0
khelper       0.0
netns         0.0
```

How it works...

The different parameters that can be used with the `-o` option and their descriptions are as follows:

Parameter	Description
<code>pcpu</code>	Percentage of CPU
<code>pid</code>	Process ID
<code>ppid</code>	Parent Process ID
<code>pmem</code>	Percentage of memory
<code>comm</code>	Executable filename
<code>cmd</code>	Simple command
<code>user</code>	The user who started the process
<code>nice</code>	The priority (niceness)
<code>time</code>	Cumulative CPU time
<code>etime</code>	Elapsed time since the process started
<code>tty</code>	The associated TTY device
<code>euid</code>	The effective user
<code>stat</code>	Process state

There's more...

Let's go through additional usage examples of process manipulation commands.

top

`top` is a very important command for system administrators. The `top` command will, by default, output a list of top CPU consuming processes. The output is updated every few seconds, and is used as follows:

```
$ top
```

It will display several parameters along with the top CPU consuming processes:

```
top - 23:21:11 up 38 min,  4 users,  load average: 1.13, 0.96, 1.11
KiB Mem:  3925048 total,  3627108 used,  297940 free,  187536 buffers
KiB Swap: 1998844 total,    0 used, 1998844 free, 2094184 cached

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
3061	shaan	20	0	526m	131m	39m	S	10.9	3.4	3:01.05	plasma-mediacen
1362	root	20	0	184m	80m	60m	S	8.6	2.1	2:40.96	Xorg
2503	shaan	20	0	286m	46m	29m	S	6.0	1.2	1:46.16	kwin
2511	shaan	20	0	403m	139m	52m	S	4.6	3.6	2:44.36	plasma-desktop
5401	shaan	20	0	875m	227m	39m	S	2.3	5.9	2:16.76	firefox
2559	shaan	20	0	115m	31m	24m	S	2.0	0.8	0:08.01	yakuake
2572	shaan	9	-11	161m	5920	4140	S	1.3	0.2	0:35.77	pulseaudio
3095	shaan	-4	0	13416	9.9m	1128	S	1.3	0.3	1:04.17	wineserver
6238	shaan	20	0	96520	21m	17m	S	1.0	0.6	0:01.18	ksnapshot
1663	quasselc	20	0	88960	17m	8096	S	0.7	0.5	0:04.47	quasselcore
6125	root	20	0	0	0	0	S	0.7	0.0	0:00.58	kworker/2:0
10	root	20	0	0	0	0	S	0.3	0.0	0:01.41	ksoftirqd/1
33	root	20	0	0	0	0	S	0.3	0.0	0:01.49	kworker/3:1
240	root	20	0	0	0	0	S	0.3	0.0	0:00.27	usb-storage
714	root	20	0	0	0	0	S	0.3	0.0	0:00.31	ips-monitor
1324	mysql	20	0	310m	32m	5692	S	0.3	0.9	0:01.94	mysqld
1956	shaan	20	0	5492	380	216	S	0.3	0.0	0:00.06	gpg-agent

Sorting the ps output with respect to a parameter

Output of the `ps` command can be sorted according to specified columns with the `--sort` parameter. The ascending or descending order can be specified by using the `+` (ascending) or `-` (descending) prefix to the parameter as follows:

```
$ ps [OPTIONS] --sort -parameter1,+parameter2,parameter3..
```