

1. Use ps to search for the “systemd” process by name.

```
[root@Control ~]# ps -e | grep systemd
  1 ?          00:00:02 systemd
 752 ?          00:00:00 systemd-journal
 788 ?          00:00:00 systemd-udevd
 975 ?          00:00:00 systemd-machine
1097 ?          00:00:00 systemd-logind
1426 ?          00:00:00 systemd-resolve
1835 ?          00:00:00 systemd
2169 ?          00:00:00 systemd
[root@Control ~]#
```

2. Find out your terminal name. Using your terminal name, use ps to find all processes associated with your terminal.

```
[root@Control ~]# ps -ef
UID          PID    PPID  C  STIME TTY          TIME CMD
root           1      0  0 Dec10 ?        00:00:03 /usr/lib/systemd/systemd --switched-root --system -
root           2      0  0 Dec10 ?        00:00:00 [kthreadd]
root           3      2  0 Dec10 ?        00:00:00 [rcu_gp]
root           4      2  0 Dec10 ?        00:00:00 [rcu_par_gp]
root           6      2  0 Dec10 ?        00:00:00 [kworker/0:0H-kblockd]
root           8      2  0 Dec10 ?        00:00:00 [mm_percpu_wq]
root           9      2  0 Dec10 ?        00:00:00 [ksoftirqd/0]
root          10      2  0 Dec10 ?        00:00:00 [rcu_sched]
root          11      2  0 Dec10 ?        00:00:00 [migration/0]
root          12      2  0 Dec10 ?        00:00:00 [watchdog/0]
root          13      2  0 Dec10 ?        00:00:00 [cpuhp/0]
root          14      2  0 Dec10 ?        00:00:00 [cpuhp/1]
root          15      2  0 Dec10 ?        00:00:00 [watchdog/1]
root          16      2  0 Dec10 ?        00:00:00 [migration/1]
root          17      2  0 Dec10 ?        00:00:00 [ksoftirqd/1]
root          19      2  0 Dec10 ?        00:00:00 [kworker/1:0H-kblockd]
root          20      2  0 Dec10 ?        00:00:00 [cpuhp/2]
root          21      2  0 Dec10 ?        00:00:00 [watchdog/2]
root          22      2  0 Dec10 ?        00:00:00 [migration/2]
root          23      2  0 Dec10 ?        00:00:00 [ksoftirqd/2]
root          25      2  0 Dec10 ?        00:00:00 [kworker/2:0H]
root          26      2  0 Dec10 ?        00:00:00 [cpuhp/3]
root          27      2  0 Dec10 ?        00:00:00 [watchdog/3]
root          28      2  0 Dec10 ?        00:00:00 [migration/3]
root          29      2  0 Dec10 ?        00:00:00 [ksoftirqd/3]
root          31      2  0 Dec10 ?        00:00:00 [kworker/3:0H]
```

3. Check and note the process id of your shell (from the output of the above command). Also, note the parent process id of your shell.

```
[root@Control ~]# ps -ef | grep 2210
root          2210    2207  0 Dec10 tty2        00:00:00 /usr/libexec/gnome-session-binary
root          2244    2210  0 Dec10 tty2        00:00:45 /usr/bin/gnome-shell
root          2421    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-power
root          2424    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-print-notifications
root          2427    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-rfkill
root          2429    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-screensaver-proxy
root          2433    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-sharing
root          2439    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-sound
root          2446    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-xsettings
root          2449    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-wacom
root          2452    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-smartcard
root          2455    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-account
root          2468    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-ally-settings
root          2469    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-clipboard
root          2472    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-color
root          2475    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-datetime
root          2478    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-housekeeping
root          2479    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-keyboard
root          2482    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-media-keys
root          2484    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-mouse
root          2587    2210  0 Dec10 tty2        00:00:01 /usr/bin/gnome-software --gapplication-service
root          2605    2210  0 Dec10 tty2        00:00:00 /usr/libexec/tracker-miner-apps
root          2607    2210  0 Dec10 tty2        00:00:00 /usr/libexec/tracker-miner-fs
root          2611    2210  0 Dec10 tty2        00:00:00 /usr/libexec/gsd-disk-utility-notify
root          4340    2723  0 01:04 pts/0        00:00:00 grep --color=auto 2210
[root@Control ~]#
```

4. Start 3 instances of “sleep 123” as background processes.

```
[root@Control home]# ps -ef | grep sleep
root      5282    1019  0 01:25 ?        00:00:00 sleep 60
root      5320    2723  0 01:26 pts/0    00:00:00 sleep 123
root      5321    4982  0 01:26 pts/2    00:00:00 sleep 123
root      5322    5020  0 01:26 pts/3    00:00:00 sleep 123
root      5332    3193  0 01:26 pts/1    00:00:00 grep --color=auto sleep
[root@Control home]#
```

5. Check and note the process id's of all sleep processes.

```
[root@Control home]# ps -ef | grep sleep
root      5282    1019  0 01:25 ?        00:00:00 sleep 60
root      5320    2723  0 01:26 pts/0    00:00:00 sleep 123
root      5321    4982  0 01:26 pts/2    00:00:00 sleep 123
root      5322    5020  0 01:26 pts/3    00:00:00 sleep 123
root      5332    3193  0 01:26 pts/1    00:00:00 grep --color=auto sleep
[root@Control home]#
```

6. Display only those three sleep processes in top. Then quit top.

```
[root@Control ~]# ps -ef | grep sleep
root      35010   1019  0 02:08 ?        00:00:00 sleep 60
root      35027   5020  0 02:08 pts/3    00:00:00 sleep 123
root      35028   4982  0 02:08 pts/2    00:00:00 sleep 123
root      35030   2723  0 02:08 pts/0    00:00:00 sleep 123
root      35032   3193  0 02:08 pts/1    00:00:00 grep --color=auto sleep
[root@Control ~]# top -b | grep sleep
Tasks: 297 total,  1 running, 296 sleeping,  0 stopped,  0 zombie
 35010 root      20  0   7280   784   724 S  0.0  0.0  0:00.00 sleep
 35027 root      20  0   7280   828   764 S  0.0  0.0  0:00.00 sleep
 35028 root      20  0   7280   828   764 S  0.0  0.0  0:00.00 sleep
 35030 root      20  0   7280   716   652 S  0.0  0.0  0:00.00 sleep
```