

# Assignment Day 6 | 7th December 2020

## Assignment - 3

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

```
parveenr@rchalab02-scomlab-local:~  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local ~]$ ps -C gedit  
  PID TTY          TIME CMD  
 5801 pts/0    00:00:02 gedit  
[parveenr@rchalab02-scomlab-local ~]$ ps -C firefox  
  PID TTY          TIME CMD  
 5664 ?        00:00:38 firefox  
[parveenr@rchalab02-scomlab-local ~]$ ps -C vi  
  PID TTY          TIME CMD  
 4604 tty2      00:00:00 vi  
[parveenr@rchalab02-scomlab-local ~]$ ps -C vim  
  PID TTY          TIME CMD  
 4582 tty3      00:00:00 vim  
[parveenr@rchalab02-scomlab-local ~]$
```

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

- a. Using w command , we can find details for user login details and their terminal information.

```
parveenr@rchalab02-scomlab-local:~  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local ~]$ w  
23:22:29 up 1:42, 5 users, load average: 3.26, 2.35, 1.02  
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU WHAT  
parveenr  :0       :0              20:14   ?xdm?  7:22   1.52s /usr/libexec/gn  
parveenr pts/0    :0              23:18   3:17   2.95s   0.09s bash  
parveenr pts/1    :0              23:18   5.00s   0.38s   0.04s w  
root      tty2     :0              22:31   39:17   0.20s   0.05s vi  
testuser  tty3     :0              22:41   39:49   0.27s   0.15s vim  
[parveenr@rchalab02-scomlab-local ~]$
```

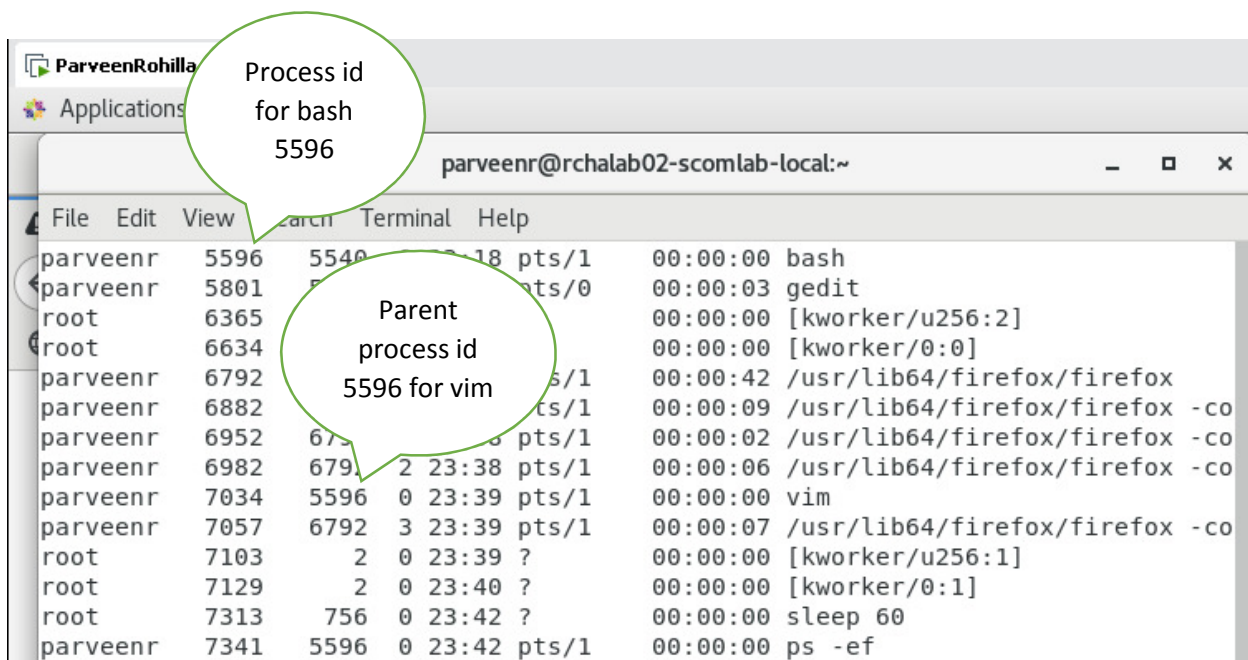
- b. Listing processes associated with a terminal for current user.

```
parveenr@rchalab02-scomlab-local:~  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local ~]$ ps -T  
  PID   SPID TTY          TIME CMD  
  5596   5596 pts/1      00:00:00 bash  
  6692   6692 pts/1      00:00:00 ps  
[parveenr@rchalab02-scomlab-local ~]$
```

- c. Listing processes associated with a terminal for other terminal users.

```
parveenr@rchalab02-scomlab-local:~  
File Edit View Search Terminal Help  
[parveenr@rchalab02-scomlab-local ~]$ ps -t tty1  
  PID TTY          TIME CMD  
 1246 tty1      00:00:55 X  
[parveenr@rchalab02-scomlab-local ~]$ ps -t tty2  
  PID TTY          TIME CMD  
 4150 tty2      00:00:00 bash  
 4604 tty2      00:00:00 vi
```

### 3. Process id and their associated parent process id.

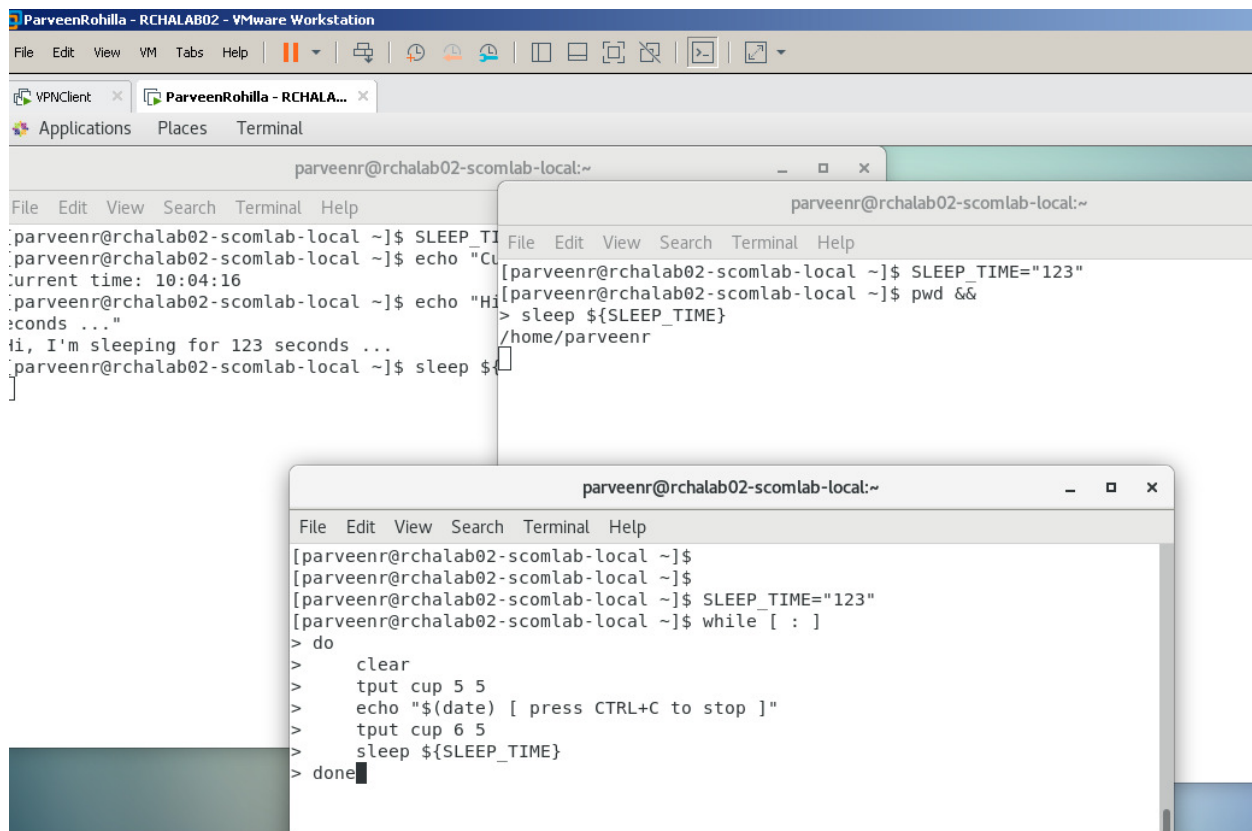


The terminal window displays the output of the `ps -ef` command. Two green callouts highlight specific information:

- A callout pointing to the first row of the process list: "Process id for bash 5596".
- A callout pointing to the 'PPID' column for the 'vim' process: "Parent process id 5596 for vim".

USER	PID	PPID	TID	PGID	SESSION	TTY	TIME	CMD
parveenr	5596	5540	5596	5596	pts/1		00:00:00	bash
parveenr	5801	5596	5801	5801	pts/0		00:00:03	gedit
root	6365	0	6365	6365			00:00:00	[kworker/u256:2]
root	6634	0	6634	6634			00:00:00	[kworker/0:0]
parveenr	6792	5596	6792	6792	pts/1		00:00:42	/usr/lib64/firefox/firefox
parveenr	6882	6792	6882	6882	pts/1		00:00:09	/usr/lib64/firefox/firefox -co
parveenr	6952	6792	6952	6952	pts/1		00:00:02	/usr/lib64/firefox/firefox -co
parveenr	6982	6792	6982	6982	pts/1		00:00:06	/usr/lib64/firefox/firefox -co
parveenr	7034	5596	7034	7034	pts/1		00:00:00	vim
parveenr	7057	6792	7057	7057	pts/1		00:00:07	/usr/lib64/firefox/firefox -co
root	7103	2	7103	7103			00:00:00	[kworker/u256:1]
root	7129	2	7129	7129			00:00:00	[kworker/0:1]
root	7313	756	7313	7313			00:00:00	sleep 60
parveenr	7341	5596	7341	7341	pts/1		00:00:00	ps -ef

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



The screenshot shows a VMware Workstation window titled "ParveenRohilla - RCHALAB02 - VMware Workstation". It contains three terminal windows, all with the prompt "parveenr@rchalab02-scomlab-local:~".

The top-left terminal window shows the following commands and output:

```
[parveenr@rchalab02-scomlab-local ~]$ SLEEP_TIME=123
[parveenr@rchalab02-scomlab-local ~]$ echo "Current time: $(date)"
Current time: 10:04:16
[parveenr@rchalab02-scomlab-local ~]$ echo "Hi, I'm sleeping for 123 seconds ..."
Hi, I'm sleeping for 123 seconds ...
[parveenr@rchalab02-scomlab-local ~]$ sleep $SLEEP_TIME
```

The top-right terminal window shows the following commands and output:

```
[parveenr@rchalab02-scomlab-local ~]$ SLEEP_TIME="123"
[parveenr@rchalab02-scomlab-local ~]$ pwd &&
/home/parveenr
[parveenr@rchalab02-scomlab-local ~]$ sleep ${SLEEP_TIME}
```

The bottom terminal window shows the following commands and output:

```
[parveenr@rchalab02-scomlab-local ~]$
[parveenr@rchalab02-scomlab-local ~]$
[parveenr@rchalab02-scomlab-local ~]$ SLEEP_TIME="123"
[parveenr@rchalab02-scomlab-local ~]$ while [ : ]
> do
>   clear
>   tput cup 5 5
>   echo "${date} [ press CTRL+C to stop ]"
>   tput cup 6 5
>   sleep ${SLEEP_TIME}
> done
```

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

ParveenRohilla - RCHALAB02 - VMware Workstation

File Edit View VM Tabs Help

Applications Places Terminal

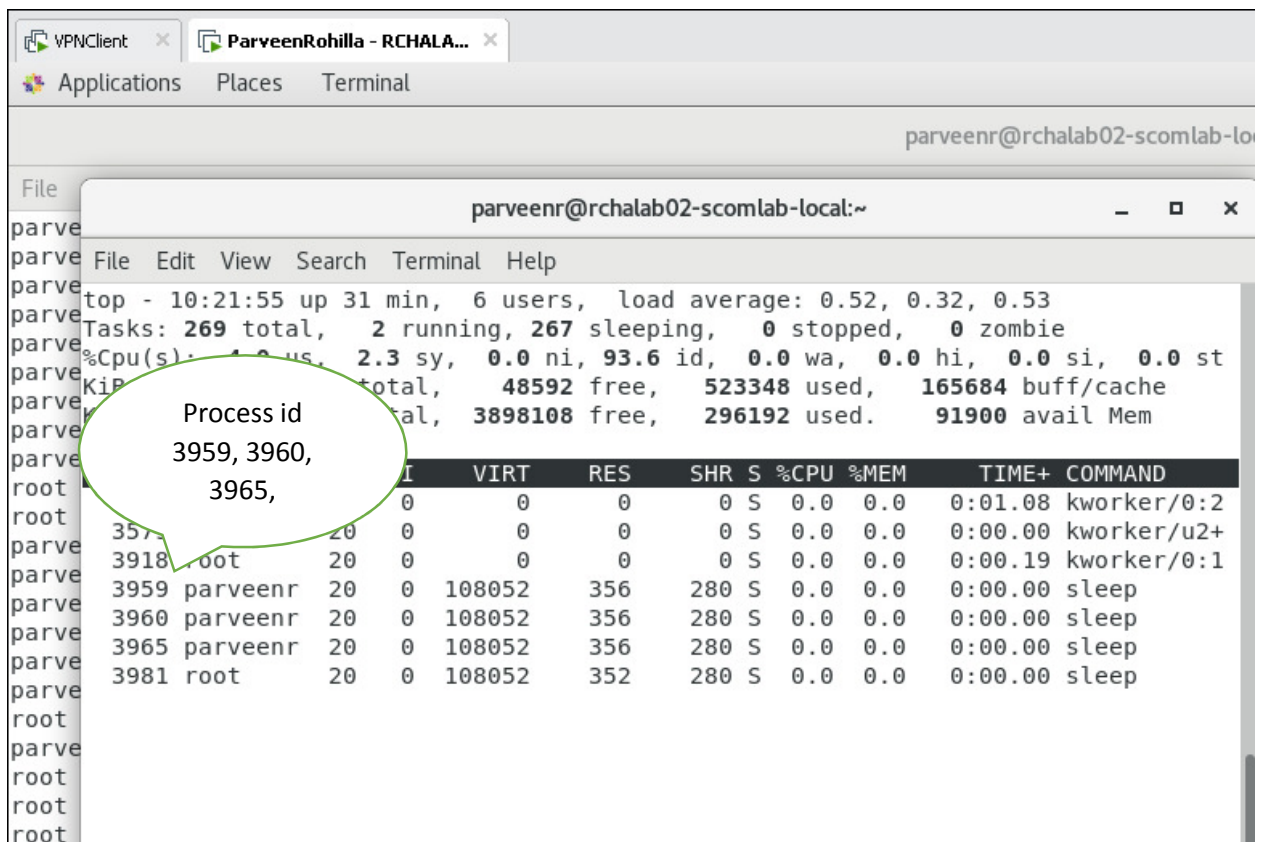
parve

File	Edit	View	Search	Terminal	Help
parveenr	2457	1892	0	09:55	? 00:00:13 /usr/bin/gnome-s
parveenr	2463	1	0	09:55	? 00:00:01 /usr/libexec/tra
parveenr	2471	1892	0	09:55	? 00:00:00 /usr/libexec/tra
parveenr	2503	1	0	09:55	? 00:00:00 /usr/libexec/evo
parveenr	2528	2503	0	09:55	? 00:00:00 /usr/libexec/evo
parveenr	2537	1933	0	09:55	? 00:00:00 /usr/libexec/gvf
parveenr	2560	1	0	09:55	? 00:00:00 /usr/libexec/evo
parveenr	2566	2110	0	09:55	? 00:00:00 /usr/libexec/ibu
parveenr	2603	2560	0	09:55	? 00:00:00 /usr/libexec/evo
root	2672	1	0	09:55	? 00:00:01 /usr/libexec/fwu
root	2698	2	0	09:55	? 00:00:00 [kworker/u256:0]
parveenr	2809	1	1	09:59	? 00:00:25 /usr/libexec/gno
parveenr	2815	2809	0	09:59	? 00:00:00 gnome-ptty-helper
parveenr	2816	2809	0	09:59	pts/0 00:00:00 bash
parveenr	2886	2809	0	09:59	pts/1 00:00:00 bash
parveenr	2931	2809	0	09:59	pts/2 00:00:00 bash
parveenr	3016	2809	0	10:00	pts/3 00:00:00 bash
root	?	?	0	10:01	? 00:00:00 /usr/sbin/anacro
parveenr	?	?	0	10:09	pts/4 00:00:00 bash
root	?	?	0	10:10	? 00:00:01 [kworker
root	?	?	0	10:10	? 00:00:00 [kwork
root	3959	?	0	10:20	? 00:00:00 [kwork
root	3935	774	0	10:20	? 00:00:00 sleep 60
parveenr	3959	2816	0	10:20	pts/0 00:00:00 sleep 123
parveenr	3960	2886	0	10:21	pts/1 00:00:00 sleep 123
parveenr	3965	2931	0	10:21	pts/2 00:00:00 sleep 123
parveenr	3966	3016	0	10:21	pts/3 00:00:00 ps -ef

Process id 3959, 3960, 3965,

"Sleep 123"

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



```
parveenr@rchalab02-scomlab-local:~  
top - 10:21:55 up 31 min, 6 users, load average: 0.52, 0.32, 0.53  
Tasks: 269 total, 2 running, 267 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 0.0 us, 2.3 sy, 0.0 ni, 93.6 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st  
Mem: 48592 total, 52348 free, 165684 buff/cache  
Mem: 3898108 total, 296192 used, 91900 avail Mem  
  PID TID          PR PRI VIRT  RES  SHR S %CPU %MEM    TIME+  COMMAND  
3577 3577          20  0     0     0     0 S  0.0  0.0    0:01.08 kworker/0:2  
3918 3918          20  0     0     0     0 S  0.0  0.0    0:00.19 kworker/u2:  
3959 3959 parveenr   20  0 108052   356  280 S  0.0  0.0    0:00.00 sleep  
3960 3960 parveenr   20  0 108052   356  280 S  0.0  0.0    0:00.00 sleep  
3965 3965 parveenr   20  0 108052   356  280 S  0.0  0.0    0:00.00 sleep  
3981 3981 root        20  0 108052   352  280 S  0.0  0.0    0:00.00 sleep
```