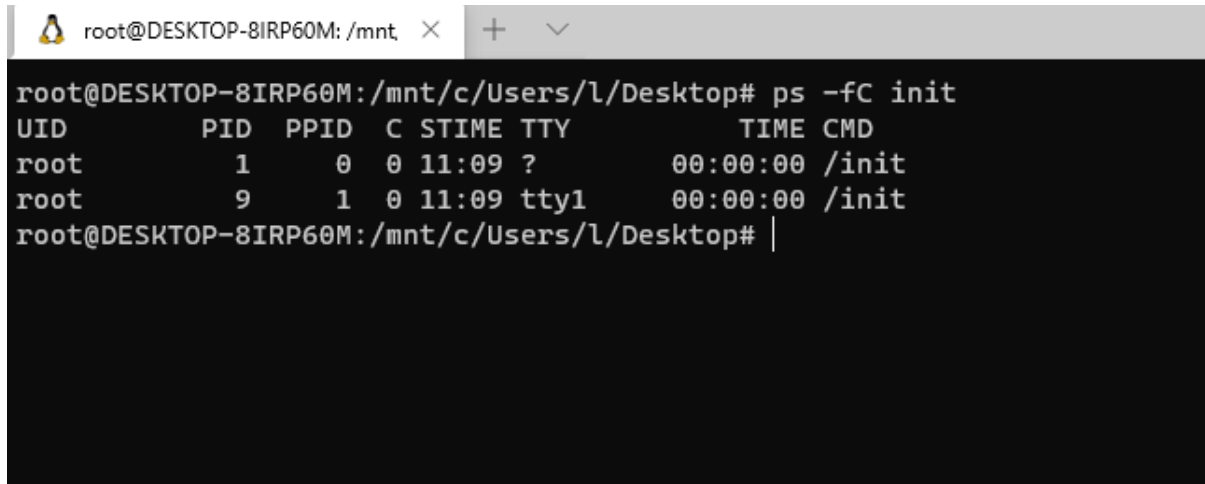


Linux Assignment-3(Day 6)

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

Ans :- “systemd” is a daemon process which starts as soon as the computer starts and continue till the system is shutdown. It was a replacement of **init** daemon. So it always has a **PID 1**.

Command:- ps -fC init → ‘ps’ is used to view running process in a system. ‘-C’ is used to search a process by its name or command. And init is the name of process.(init is replaced by system).



```
root@DESKTOP-8IRP60M: /mnt  ×  +  v
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# ps -fC init
UID          PID  PPID  C  STIME TTY          TIME CMD
root           1      0  0  11:09 ?            00:00:00 /init
root           9      1  0  11:09 tty1        00:00:00 /init
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# |
```

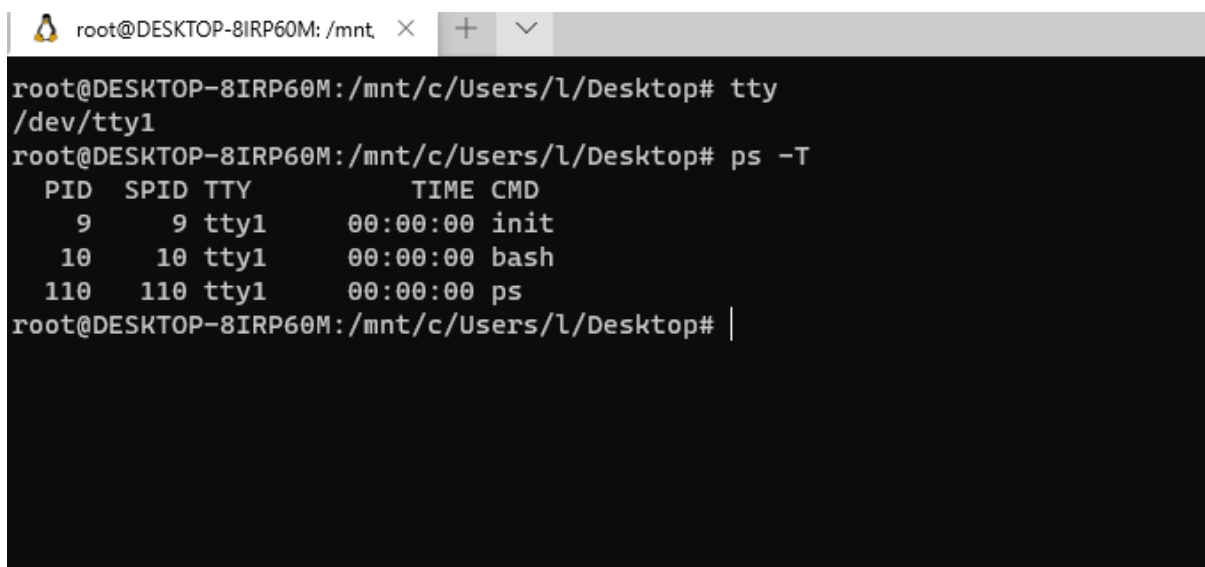
Fig shows ps to search a process by its name

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

Ans:-

Command:- tty:- is used to display terminal name

ps -T:- is used to display process running in current terminal



```
root@DESKTOP-8IRP60M: /mnt  ×  +  v
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# tty
/dev/tty1
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# ps -T
  PID  SPID TTY          TIME CMD
   9    9  tty1        00:00:00 init
  10   10  tty1        00:00:00 bash
 110  110  tty1        00:00:00 ps
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# |
```

Fig shows current terminal name and all process running in current terminal

Linux Assignment-3(Day 6)

Question-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.

Ans:-

Command:- **ps -p \$\$:-** Displays current shell PID.

ps -F:- Displays full format process associated with this pid.

```
root@DESKTOP-8IRP60M: /mnt x + v
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# ps -p $$
  PID TTY          TIME CMD
   10 tty1      00:00:01 bash
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# ps -F
  UID      PID  PPID  C  SZ  RSS  PSR  STIME  TTY          TIME CMD
  root         9      1  0 2234  224   0  11:09  tty1      00:00:00 /init
  root        10       9  0 4554 3752   0  11:09  tty1      00:00:01 -bash
  root       168      10  0 4666 1892   0  12:44  tty1      00:00:00 ps -F
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# |
```

Fig shows pid and ppid of current terminal

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

Ans:-

Commad:- **sleep 123 &:-** create an instance of sleep 123 in the background

```
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# sleep 123 &
[1] 169
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# sleep 123 &
[2] 170
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# sleep 123 &
[3] 171
```

Fig shows creation of sleep 123 instances in the background.

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

Ans:-

Command:- **ps -e | grep sleep:-** shows all the process id's of sleep instances.

```
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# ps -e | grep sleep
 169 tty1      00:00:00 sleep
 170 tty1      00:00:00 sleep
 171 tty1      00:00:00 sleep
root@DESKTOP-8IRP60M:/mnt/c/Users/L/Desktop# |
```

Fig shows PID of all sleep processes

Linux Assignment-3(Day 6)

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

Ans:-

Command: **-top -p pid,pid,pid**

```
root@DESKTOP-8IRP60M: /mnt  ×  +  ∨
root@DESKTOP-8IRP60M:/mnt/c/Users/l/Desktop# top -p 169,170,171
top - 12:47:52 up 1:38, 0 users, load average: 0.52, 0.58, 0.59
Tasks: 3 total, 0 running, 3 sleeping, 0 stopped, 0 zombie
%Cpu(s): 6.2 us, 18.7 sy, 0.0 ni, 74.5 id, 0.0 wa, 0.7 hi, 0.0 si, 0.0 st
MiB Mem : 8112.2 total, 2557.6 free, 5330.5 used, 224.0 buff/cache
MiB Swap: 12456.2 total, 12333.4 free, 122.8 used, 2651.0 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR  S  %CPU  %MEM    TIME+  COMMAND
  169 root        20   0   15276    824    684  S   0.0   0.0   0:00.03  sleep
  170 root        20   0   15276    824    684  S   0.0   0.0   0:00.03  sleep
  171 root        20   0   15276    824    684  S   0.0   0.0   0:00.03  sleep

root@DESKTOP-8IRP60M:/mnt/c/Users/l/Desktop# |
```