

# Assignment – Process Management

1) List out highest priority process in the system

```
aayush@LAPTOP-LIID2FSU: ~  
aayush@LAPTOP-LIID2FSU:~$ ps -eo pid,comm,pri --sort=-pri | head -n 2  
PID COMMAND PRI  
38 systemd-journal 20  
aayush@LAPTOP-LIID2FSU:~$
```

2) Open terminal with 2 tabs or sessions

a) run command "vmstat 1"

b) switch to another tab, pause running vmstat command for few seconds and resume it again

use appropriate SIGNALS to do this activity.

```
aayush@LAPTOP-LIID2FSU: ~ root@LAPTOP-LIID2FSU: /mnt  
aayush@LAPTOP-LIID2FSU:~$ vmstat 1  
procs -----memory----- --swap-- -----io----- -system-- -----cpu-----  
r b swpd free buff cache si so bi bo in cs us sy id wa st  
0 0 0 7017844 17064 438176 0 0 131 54 35 80 0 0 99 0 0  
0 0 0 7019356 17064 438216 0 0 0 0 62 194 0 0 100 0 0  
0 0 0 7019216 17064 438216 0 0 0 0 62 203 0 0 100 0 0  
0 0 0 7019216 17064 438216 0 0 0 0 63 202 0 0 100 0 0  
0 0 0 7019216 17064 438216 0 0 0 0 65 196 0 0 100 0 0  
0 0 0 7017188 17064 438216 0 0 0 0 66 209 0 0 100 0 0  
0 0 0 7017188 17064 438216 0 0 0 0 66 197 0 0 100 0 0  
0 0 0 7016936 17072 438216 0 0 0 12 64 211 0 0 100 0 0  
0 0 0 7017188 17072 438216 0 0 0 0 63 190 0 0 100 0 0  
0 0 0 7017188 17072 438216 0 0 0 0 60 188 0 0 100 0 0  
1 0 0 7017188 17072 438216 0 0 0 0 55 177 0 0 100 0 0  
0 0 0 7018696 17072 438216 0 0 0 4 74 352 0 0 100 0 0  
0 0 0 7018752 17072 438216 0 0 0 0 64 196 0 0 100 0 0  
0 0 0 7018248 17072 438216 0 0 0 0 62 188 0 0 100 0 0  
0 0 0 7019004 17072 438216 0 0 0 0 64 215 0 0 100 0 0  
0 0 0 7012340 17072 438216 0 0 0 0 86 208 0 0 100 0 0  
0 0 0 7012340 17072 438216 0 0 0 0 64 201 0 0 100 0 0  
0 0 0 7012340 17072 438216 0 0 0 0 65 205 0 0 100 0 0  
0 0 0 7012340 17072 438216 0 0 0 0 61 198 0 0 100 0 0  
0 0 0 7012340 17072 438216 0 0 0 0 61 194 0 0 100 0 0
```

```
aayush@LAPTOP-LIID2FSU: ~ X root@LAPTOP-LIID2FSU: /mnt X + v
root@LAPTOP-LIID2FSU:/mnt/c/Users/HP# ps aux | grep vmstat
aayush      1658  0.0  0.0  6852  2992 pts/0    S+   22:01   0:00  vmstat 1
root        2380  0.0  0.0   4028   2092 pts/2    S+   22:04   0:00  grep --color=auto vmstat
root@LAPTOP-LIID2FSU:/mnt/c/Users/HP# kill -SIGSTOP 1658
root@LAPTOP-LIID2FSU:/mnt/c/Users/HP# kill -SIGCONT 1658
root@LAPTOP-LIID2FSU:/mnt/c/Users/HP# |
```

```
aayush@LAPTOP-LIID2FSU: ~ X root@LAPTOP-LIID2FSU: /mnt X + v
0 0 0 6938220 17380 501208 0 0 0 0 64 194 0 0 100 0 0
0 0 0 6938220 17380 501208 0 0 0 0 64 190 0 0 100 0 0
0 0 0 6938472 17380 501208 0 0 0 0 69 206 0 0 100 0 0
0 0 0 6938472 17380 501208 0 0 0 0 56 184 0 0 100 0 0
0 0 0 6938220 17380 501208 0 0 0 0 57 180 0 0 100 0 0
0 0 0 6938220 17380 501208 0 0 0 0 72 224 0 0 100 0 0
0 0 0 6937012 17380 501208 0 0 0 0 80 242 0 0 100 0 0
0 0 0 6937048 17380 501208 0 0 0 0 50 158 0 0 100 0 0
0 0 0 6937048 17380 501208 0 0 0 0 61 321 0 0 100 0 0
0 0 0 6936836 17380 501208 0 0 0 0 64 206 0 0 100 0 0
procs -----memory----- --swap-- --io-- --system-- --cpu-----
r b swpd free buff cache si so bi bo in cs us sy id wa st
0 0 0 6936836 17380 501208 0 0 0 0 68 202 0 0 100 0 0

[1]+  Stopped                  vmstat 1
aayush@LAPTOP-LIID2FSU:~$ 0 0 0 6929184 17400 501220 0 0 0 0 52 174 0 0 100 0 0
1 0 0 6929424 17400 501220 0 0 0 0 74 345 0 0 100 0 0
0 0 0 6929028 17400 501220 0 0 0 0 60 197 0 0 100 0 0
0 0 0 6928776 17400 501220 0 0 0 0 58 189 0 0 100 0 0
0 0 0 6929404 17400 501220 0 0 0 0 75 224 0 0 100 0 0
0 0 0 6929572 17400 501220 0 0 0 0 62 189 0 0 100 0 0
0 0 0 6929572 17400 501220 0 0 0 0 63 192 0 0 100 0 0
```

SIGNALS USED : Kill -SIGSTOP "pid"  
Kill -SIGCONT "pid"

3) Find the process which is sleeping in "wait" state

```
root@LAPTOP-LIID2FSU: ~ X + v
root@LAPTOP-LIID2FSU:~# ps -eo pid,comm,state | grep 'S' | head -n 5
PID COMMAND S
1 systemd S
2 init-systemd(Ub S
9 init S
38 systemd-journal S
root@LAPTOP-LIID2FSU:~# |
```