

# FCFS

```
shivaansehgal@shivaansehgal-Inspiron-5379: ~/3sem/os/5ass/shivaan
usertests      2 20 56220
wc             2 21 14200
zombie        2 22 12392
console       3 23 0
$ sanity 10
CPU-S bound, pid: 5, ready: 0, running: 3, sleeping: 713, turnaround: 716
CPU-S bound, pid: 8, ready: 11, running: 0, sleeping: 713, turnaround: 724
CPU-bound, pid: 7, ready: 3, running: 40, sleeping: 713, turnaround: 756
CPU-S bound, pid: 11, ready: 42, running: 3, sleeping: 716, turnaround: 761
CPU-bound, pid: 10, ready: 52, running: 0, sleeping: 716, turnaround: 768
CPU-S bound, pid: 14, ready: 52, running: 0, sleeping: 717, turnaround: 769
CPU-bound, pid: 13, ready: 59, running: 42, sleeping: 717, turnaround: 818
I/O bound, pid: 6, ready: 116, running: 0, sleeping: 713, turnaround: 829
I/O bound, pid: 9, ready: 122, running: 1, sleeping: 716, turnaround: 839
I/O bound, pid: 12, ready: 165, running: 0, sleeping: 716, turnaround: 881

CPU bound:
Average ready time: 11
Average running time: 8
Average sleeping time: 214
Average turnaround time: 233

CPU-S bound:
Average ready time: 10
Average running time: 0
Average sleeping time: 285
Average turnaround time: 295

I/O bound:
Average ready time: 40
Average running time: 0
Average sleeping time: 214
Average turnaround time: 254

$ QEMU: Terminated
ShivaanSehgal:~/3sem/os/5ass/shivaan$ make clean qemu-nox SCHEDULER=MLFQ
rm -f *.tex *.dvi *.idx *.aux *.log *.ind *.ilg \
*.o *.d *.asm *.sym vectors.S bootblock entryother \
initcode initcode.out kernel xv6.img fs.img kernelmemfs \
```

# MLFQ

```
shivaansehgal@shivaansehgal-Inspiron-5379: ~/3sem/os/5ass/shivaan
wc             2 21 14200
zombie        2 22 12392
console       3 23 0
$ sanity
Usage: sanity [n]
$
exec: fail
exec failed
$ sanity 10
CPU-bound, pid: 10, ready: 36, running: 3, sleeping: 1441, turnaround: 1480
CPU-bound, pid: 16, ready: 40, running: 5, sleeping: 1442, turnaround: 1487
CPU-S bound, pid: 8, ready: 85, running: 0, sleeping: 1440, turnaround: 1525
CPU-bound, pid: 13, ready: 40, running: 50, sleeping: 1441, turnaround: 1531
CPU-S bound, pid: 11, ready: 90, running: 1, sleeping: 1441, turnaround: 1532
CPU-S bound, pid: 14, ready: 95, running: 0, sleeping: 1442, turnaround: 1537
I/O bound, pid: 9, ready: 171, running: 1, sleeping: 1441, turnaround: 1613
I/O bound, pid: 12, ready: 172, running: 0, sleeping: 1441, turnaround: 1613
I/O bound, pid: 15, ready: 172, running: 0, sleeping: 1442, turnaround: 1614
CPU-bound, pid: 7, ready: 2628, running: 159, sleeping: 1440, turnaround: 4227

CPU bound:
Average ready time: 274
Average running time: 21
Average sleeping time: 576
Average turnaround time: 871

CPU-S bound:
Average ready time: 27
Average running time: 0
Average sleeping time: 432
Average turnaround time: 459

I/O bound:
Average ready time: 51
Average running time: 0
Average sleeping time: 432
Average turnaround time: 483

$ █
```

# PRIORITY

```
shivaansehgal@shivaansehgal-Inspiron-5379: ~/3sem/os/5ass/shivaan
usertests      2 20 56220
wc             2 21 14200
zombie        2 22 12392
console       3 23 0
$ sanity
Usage: sanity [n]
$ sanity 10
CPU-bound, pid: 10, ready: 66, running: 22, sleeping: 1178, turnaround: 1266
CPU-S bound, pid: 8, ready: 153, running: 11, sleeping: 1177, turnaround: 1341
CPU-S bound, pid: 11, ready: 164, running: 14, sleeping: 1178, turnaround: 1356
CPU-S bound, pid: 14, ready: 163, running: 16, sleeping: 1182, turnaround: 1361
CPU-bound, pid: 13, ready: 134, running: 53, sleeping: 1182, turnaround: 1369
I/O bound, pid: 15, ready: 179, running: 8, sleeping: 1182, turnaround: 1369
I/O bound, pid: 9, ready: 186, running: 7, sleeping: 1178, turnaround: 1371
I/O bound, pid: 6, ready: 195, running: 8, sleeping: 1177, turnaround: 1380
I/O bound, pid: 12, ready: 197, running: 5, sleeping: 1180, turnaround: 1382
CPU-bound, pid: 7, ready: 2875, running: 103, sleeping: 1177, turnaround: 4155

CPU bound:
Average ready time: 307
Average running time: 17
Average sleeping time: 353
Average turnaround time: 677

CPU-S bound:
Average ready time: 48
Average running time: 4
Average sleeping time: 353
Average turnaround time: 405

I/O bound:
Average ready time: 75
Average running time: 2
Average sleeping time: 471
Average turnaround time: 548

$ QEMU: Terminated
ShivaanSehgal:~/3sem/os/5ass/shivaan$ make clean qemu-nox
rm -f *.tex *.dvi *.idx *.aux *.log *.ind *.ilg \
```

# ROUND ROBIN

```
shivaansehgal@shivaansehgal-Inspiron-5379: ~/3sem/os/5ass/shivaan
ROUND ROBIN SCHEDULER
cpu0: starting 0
ROUND ROBIN SCHEDULER
sb: size 1000 nblocks 941 ninodes 200 nlog 30 logstart 2 inodestart 32 bmap start 58
Scheduler policy: DEFAULT
init: starting sh
$ sanity
Usage: sanity [n]
$ sanity 10
CPU-bound, pid: 13, ready: 30, running: 15, sleeping: 621, turnaround: 666
CPU-S bound, pid: 5, ready: 68, running: 0, sleeping: 617, turnaround: 685
CPU-S bound, pid: 8, ready: 69, running: 0, sleeping: 617, turnaround: 686
CPU-S bound, pid: 11, ready: 69, running: 0, sleeping: 618, turnaround: 687
CPU-S bound, pid: 14, ready: 67, running: 0, sleeping: 621, turnaround: 688
CPU-bound, pid: 7, ready: 78, running: 19, sleeping: 617, turnaround: 714
I/O bound, pid: 6, ready: 100, running: 0, sleeping: 617, turnaround: 717
I/O bound, pid: 9, ready: 101, running: 0, sleeping: 618, turnaround: 719
I/O bound, pid: 12, ready: 102, running: 0, sleeping: 619, turnaround: 721
CPU-bound, pid: 10, ready: 957, running: 2138, sleeping: 618, turnaround: 3713

CPU bound:
Average ready time: 106
Average running time: 217
Average sleeping time: 185
Average turnaround time: 508

CPU-S bound:
Average ready time: 27
Average running time: 0
Average sleeping time: 247
Average turnaround time: 274

I/O bound:
Average ready time: 30
Average running time: 0
Average sleeping time: 185
Average turnaround time: 215

$ █
```