

# ch 5

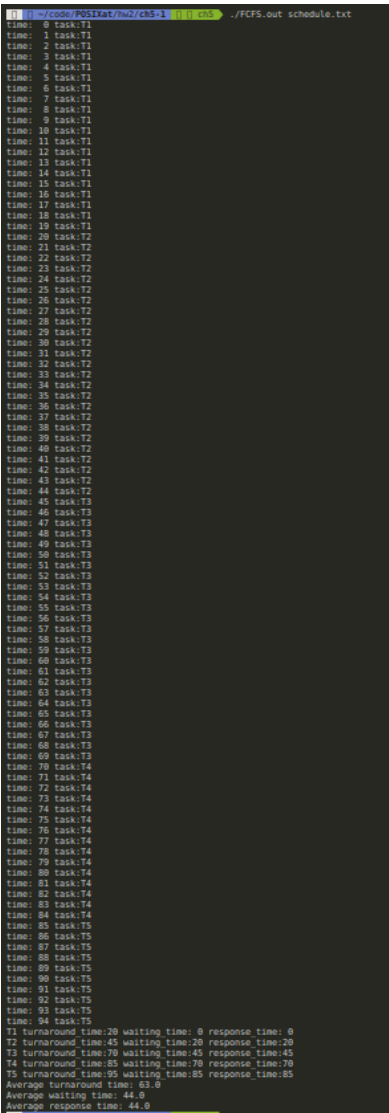
## run

```
make

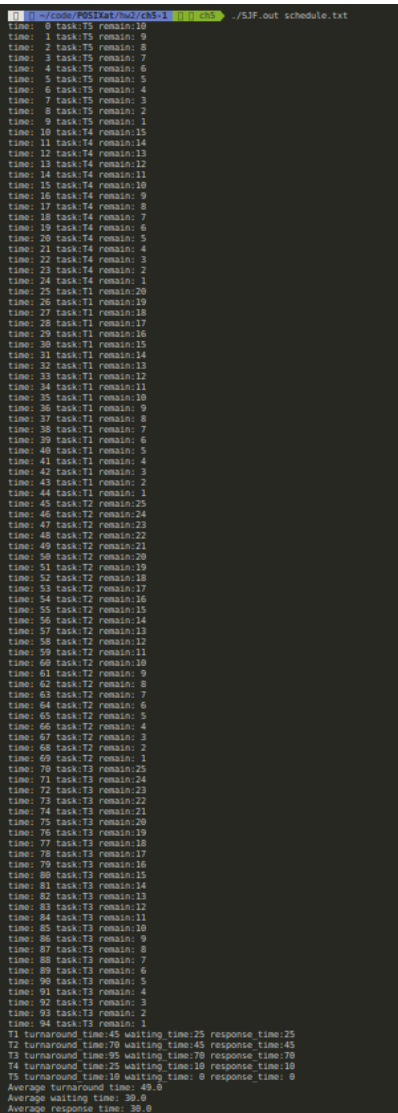
./FCFS.out schedule.txt
./SJF.out schedule.txt
./priority.out schedule.txt
./RR.out schedule.txt
./priority_RR.out schedule.txt
```

## screenshot

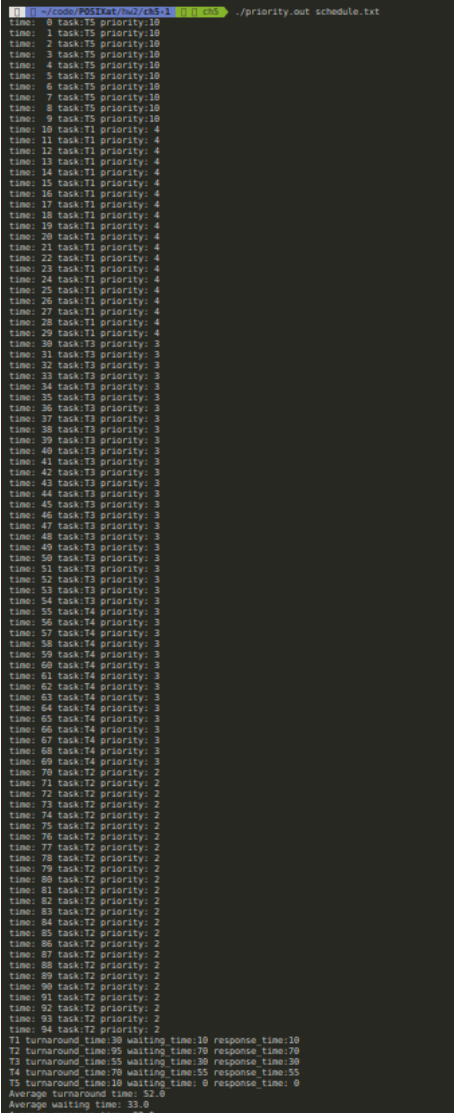
FCFS



SJF



priority



RR (quantum = 4)

priority\_RR (quantum = 4)

## RR (quantum = 4)

```
gcc priority_rr.c -o priority_rr.out
nvidia@ubuntu:~/Desktop/ch5_25 ./RR.out schedule.txt
time: 0 task:T1 burst:20
time: 1 task:T1 burst:19
time: 2 task:T1 burst:18
time: 3 task:T1 burst:17
time: 4 task:T2 burst:25
time: 5 task:T2 burst:24
time: 6 task:T2 burst:23
time: 7 task:T2 burst:22
time: 8 task:T3 burst:25
time: 9 task:T3 burst:24
time: 10 task:T3 burst:23
time: 11 task:T3 burst:22
time: 12 task:T4 burst:15
time: 13 task:T4 burst:14
time: 14 task:T4 burst:13
time: 15 task:T4 burst:12
time: 16 task:T5 burst:10
time: 17 task:T5 burst: 9
time: 18 task:T5 burst: 8
time: 19 task:T5 burst: 7
time: 20 task:T1 burst:10
time: 21 task:T1 burst:15
time: 22 task:T1 burst:14
time: 23 task:T1 burst:13
time: 24 task:T2 burst:21
time: 25 task:T2 burst:20
time: 26 task:T2 burst:19
time: 27 task:T2 burst:18
time: 28 task:T3 burst:21
time: 29 task:T3 burst:20
time: 30 task:T3 burst:19
time: 31 task:T3 burst:18
time: 32 task:T4 burst:11
time: 33 task:T4 burst:10
time: 34 task:T4 burst: 9
time: 35 task:T4 burst: 8
time: 36 task:T5 burst: 6
time: 37 task:T5 burst: 5
time: 38 task:T5 burst: 4
time: 39 task:T5 burst: 3
time: 40 task:T1 burst:12
time: 41 task:T1 burst:11
time: 42 task:T1 burst:10
time: 43 task:T1 burst: 9
time: 44 task:T2 burst:17
time: 45 task:T2 burst:16
time: 46 task:T2 burst:15
time: 47 task:T2 burst:14
time: 48 task:T3 burst:17
time: 49 task:T3 burst:16
time: 50 task:T3 burst:15
time: 51 task:T3 burst:14
time: 52 task:T4 burst: 7
time: 53 task:T4 burst: 6
time: 54 task:T4 burst: 5
time: 55 task:T4 burst: 4
time: 56 task:T5 burst: 2
time: 57 task:T5 burst: 1
time: 58 task:T1 burst: 8
time: 59 task:T1 burst: 7
time: 60 task:T1 burst: 6
time: 61 task:T1 burst: 5
time: 62 task:T2 burst:13
time: 63 task:T2 burst:12
time: 64 task:T2 burst:11
time: 65 task:T2 burst:10
time: 66 task:T3 burst:13
time: 67 task:T3 burst:12
time: 68 task:T3 burst:11
time: 69 task:T3 burst:10
time: 70 task:T4 burst: 3
time: 71 task:T4 burst: 2
time: 72 task:T4 burst: 1
time: 73 task:T1 burst: 4
time: 74 task:T1 burst: 3
time: 75 task:T1 burst: 2
time: 76 task:T1 burst: 1
time: 77 task:T2 burst: 9
time: 78 task:T2 burst: 8
time: 79 task:T2 burst: 7
time: 80 task:T2 burst: 6
time: 81 task:T3 burst: 9
time: 82 task:T3 burst: 8
time: 83 task:T3 burst: 7
time: 84 task:T3 burst: 6
time: 85 task:T2 burst: 5
time: 86 task:T2 burst: 4
time: 87 task:T2 burst: 3
time: 88 task:T2 burst: 2
time: 89 task:T3 burst: 5
time: 90 task:T3 burst: 4
time: 91 task:T3 burst: 3
time: 92 task:T3 burst: 2
time: 93 task:T2 burst: 1
time: 94 task:T3 burst: 1
T1 turnaround_time:77 waiting_time:57 response_time: 0
T2 turnaround_time:94 waiting_time:09 response_time: 4
T3 turnaround_time:95 waiting_time:70 response_time: 8
T4 turnaround_time:73 waiting_time:58 response_time:12
T5 turnaround_time:58 waiting_time:48 response_time:10
Average turnaround time: 79.4
Average waiting time: 60.4
Average response time: 8.0
```

## priority\_RR (quantum = 4)

```
Average response time: 8.0
nvidia@ubuntu:~/Desktop/ch5_25 ./priority_RR.out schedule.txt
time: 0 task:T2 burst:25 priority: 2
time: 1 task:T2 burst:24 priority: 2
time: 2 task:T2 burst:23 priority: 2
time: 3 task:T2 burst:22 priority: 2
time: 4 task:T2 burst:21 priority: 2
time: 5 task:T2 burst:20 priority: 2
time: 6 task:T2 burst:19 priority: 2
time: 7 task:T2 burst:18 priority: 2
time: 8 task:T2 burst:17 priority: 2
time: 9 task:T2 burst:16 priority: 2
time: 10 task:T2 burst:15 priority: 2
time: 11 task:T2 burst:14 priority: 2
time: 12 task:T2 burst:13 priority: 2
time: 13 task:T2 burst:12 priority: 2
time: 14 task:T2 burst:11 priority: 2
time: 15 task:T2 burst:10 priority: 2
time: 16 task:T2 burst: 9 priority: 2
time: 17 task:T2 burst: 8 priority: 2
time: 18 task:T2 burst: 7 priority: 2
time: 19 task:T2 burst: 6 priority: 2
time: 20 task:T2 burst: 5 priority: 2
time: 21 task:T2 burst: 4 priority: 2
time: 22 task:T2 burst: 3 priority: 2
time: 23 task:T2 burst: 2 priority: 2
time: 24 task:T2 burst: 1 priority: 2
time: 25 task:T3 burst:25 priority: 3
time: 26 task:T3 burst:24 priority: 3
time: 27 task:T3 burst:23 priority: 3
time: 28 task:T3 burst:22 priority: 3
time: 29 task:T4 burst:15 priority: 3
time: 30 task:T4 burst:14 priority: 3
time: 31 task:T4 burst:13 priority: 3
time: 32 task:T4 burst:12 priority: 3
time: 33 task:T3 burst:21 priority: 3
time: 34 task:T3 burst:20 priority: 3
time: 35 task:T3 burst:19 priority: 3
time: 36 task:T3 burst:18 priority: 3
time: 37 task:T4 burst:11 priority: 3
time: 38 task:T4 burst:10 priority: 3
time: 39 task:T4 burst: 9 priority: 3
time: 40 task:T4 burst: 8 priority: 3
time: 41 task:T3 burst:17 priority: 3
time: 42 task:T3 burst:16 priority: 3
time: 43 task:T3 burst:15 priority: 3
time: 44 task:T3 burst:14 priority: 3
time: 45 task:T4 burst: 7 priority: 3
time: 46 task:T4 burst: 6 priority: 3
time: 47 task:T4 burst: 5 priority: 3
time: 48 task:T4 burst: 4 priority: 3
time: 49 task:T3 burst:13 priority: 3
time: 50 task:T3 burst:12 priority: 3
time: 51 task:T3 burst:11 priority: 3
time: 52 task:T3 burst:10 priority: 3
time: 53 task:T4 burst: 3 priority: 3
time: 54 task:T4 burst: 2 priority: 3
time: 55 task:T4 burst: 1 priority: 3
time: 56 task:T3 burst: 9 priority: 3
time: 57 task:T3 burst: 8 priority: 3
time: 58 task:T3 burst: 7 priority: 3
time: 59 task:T3 burst: 6 priority: 3
time: 60 task:T3 burst: 5 priority: 3
time: 61 task:T3 burst: 4 priority: 3
time: 62 task:T3 burst: 3 priority: 3
time: 63 task:T3 burst: 2 priority: 3
time: 64 task:T3 burst: 1 priority: 3
time: 65 task:T1 burst:20 priority: 4
time: 66 task:T1 burst:19 priority: 4
time: 67 task:T1 burst:18 priority: 4
time: 68 task:T1 burst:17 priority: 4
time: 69 task:T1 burst:16 priority: 4
time: 70 task:T1 burst:15 priority: 4
time: 71 task:T1 burst:14 priority: 4
time: 72 task:T1 burst:13 priority: 4
time: 73 task:T1 burst:12 priority: 4
time: 74 task:T1 burst:11 priority: 4
time: 75 task:T1 burst:10 priority: 4
time: 76 task:T1 burst: 9 priority: 4
time: 77 task:T1 burst: 8 priority: 4
time: 78 task:T1 burst: 7 priority: 4
time: 79 task:T1 burst: 6 priority: 4
time: 80 task:T1 burst: 5 priority: 4
time: 81 task:T1 burst: 4 priority: 4
time: 82 task:T1 burst: 3 priority: 4
time: 83 task:T1 burst: 2 priority: 4
time: 84 task:T1 burst: 1 priority: 4
time: 85 task:T5 burst:10 priority:10
time: 86 task:T5 burst: 9 priority:10
time: 87 task:T5 burst: 8 priority:10
time: 88 task:T5 burst: 7 priority:10
time: 89 task:T5 burst: 6 priority:10
time: 90 task:T5 burst: 5 priority:10
time: 91 task:T5 burst: 4 priority:10
time: 92 task:T5 burst: 3 priority:10
time: 93 task:T5 burst: 2 priority:10
time: 94 task:T5 burst: 1 priority:10
T1 turnaround_time:85 waiting_time:05 response_time:65
T2 turnaround_time:25 waiting_time: 0 response_time: 0
T3 turnaround_time:05 waiting_time:40 response_time:25
T4 turnaround_time:50 waiting_time:41 response_time:29
T5 turnaround_time:95 waiting_time:85 response_time:85
Average turnaround time: 65.2
Average waiting time: 46.2
Average response time: 40.8
```