FCFS

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 1 1 1 2 2 2 2 2 2 2 3 3 3 3 0 0 0 1 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 3 3

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 40

CPU Utilization: 1.0

Throughput: 0.1

Average Turnaround Time: 26.75

Average Waiting Time: 13.0

Average Context Switches: 2.0

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 108

CPU Utilization: 1.0

Throughput: 0.037037037037037035

Average Turnaround Time: 81.25

Average Waiting Time: 47.5

Average Context Switches: 2.0

SJF-NP

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 1 1 1 3 3 3 3 0 0 0 1 1 1 1 1 1 3 3 3 3 3 3 3 2 2 2 2 2 2 2 -1 -1 -1 2 2 2 2 2

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 43

CPU Utilization: 0.9302325581395349

Throughput: 0.09302325581395349

Average Turnaround Time: 22.75

Average Waiting Time: 9.0

Average Context Switches: 2.25

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 2 2 2 2 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 108

CPU Utilization: 1.0

Throughput: 0.037037037037037035

Average Turnaround Time: 76.75

Average Waiting Time: 43.0

Average Context Switches: 2.0

SJF-P

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 1 1 1 0 0 0 3 3 3 3 0 0 0 1 1 1 1 1 1 3 3 3 3 3 3 3 2 2 2 2 2 2 2 -1 -1 -1 2 2 2 2 2

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 43

CPU Utilization: 0.9302325581395349

Throughput: 0.09302325581395349

Average Turnaround Time: 22.75

Average Waiting Time: 9.0

Average Context Switches: 2.5

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 1 1 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 108

CPU Utilization: 1.0

Throughput: 0.037037037037037035

Average Turnaround Time: 75.75

Average Waiting Time: 42.0

Average Context Switches: 2.25

RR-4

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 1 1 1 0 2 2 2 2 3 3 3 3 1 1 1 1 0 0 0 2 2 2 3 3 3 3 1 1 2 2 2 2 3 3 3 2

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 40

CPU Utilization: 1.0

Throughput: 0.1

Average Turnaround Time: 29.5

Average Waiting Time: 15.75

Average Context Switches: 3.25

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 1 1 1 1 0 0 0 0 2 2 2 2 3 3 3 3 1 1 1 1 0 0 0 0 2 2 2 2 3 3 3 3 1 1 1 1 0 0 0 2 2 3 1 1 1 1 2 2 2 2 1 1 1 1 3 3 3 3 2 2 2 2 0 0 0 0 1 1 1 1 3 3 3 3 2 2 2 2 0 0 0 0 3 3 3 3 0 0 0 0 3 3 3 3 0 0 0 0 3 0 0 0 0 0

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 108

CPU Utilization: 1.0

Throughput: 0.037037037037037035

Average Turnaround Time: 87.75

Average Waiting Time: 54.0

Average Context Switches: 7.25

PriorityQueue - RoundRobin(os,9), RoundRobin(os,6), RoundRobin(os,3)

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 1 1 1 2 2 2 0 0 0 1 1 1 1 1 1 2 2 2 3 3 3 2 3 -1 -1 2 2 2 3 3 3 2 2 3 3 3 3

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 42

CPU Utilization: 0.9523809523809523

Throughput: 0.09523809523809523

Average Turnaround Time: 24.5

Average Waiting Time: 10.75

Average Context Switches: 3.5

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 3 3 3 3 3 3 2 2 2 2 3 3 3 -1 -1 2 2 2 2 2 2 3 3 3 3 3 3 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 110

CPU Utilization: 0.9818181818181818

Throughput: 0.03636363636363636

Average Turnaround Time: 73.0

Average Waiting Time: 39.25

Average Context Switches: 3.5

MFQ - MFQ(os,new RoundRobin(os,3), RoundRobin(os,6), FCFS(os)

Simpler

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 1 1 1 2 2 2 3 3 3 1 1 1 0 0 2 2 2 2 0 0 0 2 2 2 3 1 1 1 3 3 3 2 2 3 3 3 3

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 40

CPU Utilization: 1.0

Throughput: 0.1

Average Turnaround Time: 28.75

Average Waiting Time: 15.0

Average Context Switches: 3.5

Simpler2

\*\*\*\*\*\*SIMULATION FINISHES\*\*\*\*\*\*

\*\*\*\*\*\*Process Execution\*\*\*\*\*\*

0 0 0 1 1 1 2 2 2 3 3 3 0 0 0 0 0 0 1 1 1 1 1 2 2 2 2 2 2 1 1 1 3 3 3 3 3 3 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 2 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0 3 3 3 3 3 3 3 3 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0

\*\*\*\*\*\*Performance Indicators\*\*\*\*\*\*

Total execution cycles: 108

CPU Utilization: 1.0

Throughput: 0.037037037037037035

Average Turnaround Time: 87.0

Average Waiting Time: 53.25

Average Context Switches: 4.75