



**Bilkent University
Engineering Faculty
Department of Computer Engineering**

**CS 342
Project 2
Report**

**Aziz Ozan Azizoğlu
21401701**

**Vural Doğan Akoğlu
21602479**

Process Table

Process	Arrival Time (ms)	Burst Time (ms)
P1	0	40
P2	15	25
P3	25	30
P4	35	45
P5	55	25

First Come First Serve

0	40	65	95	140	165
P1	P2	P3	P4	P5	

Shortest Job First

0	40	65	90	120	165
P1	P2	P5	P3	P4	

Shortest Remaining Time First

0	15	40	65	90	120	165
P1	P2	P1	P5	P3	P4	

Round Robin (Quantum ≥ 45)

When the quantum value is greater than equal to the burst time of the process with the highest burst time, round robin behaves exactly like First Come First Serve. The process with the largest burst time is process 4, which is 45. So when the quantum time is greater than that value, RR becomes FCFS.

0	40	65	95	140	165
P1	P2	P3	P4	P5	

Round Robin (Quantum = 30)

0	30	55	85	95	125	150	165
P1	P2	P3	P1	P4	P5	P4	

Round Robin (Quantum = 20)

0	20	40	60	80	100	105	125	135
P1	P2	P1	P3	P4	P2	P5	P3	

135	155	160	165
P4	P5	P4	

Scheduling Algorithm Comparison

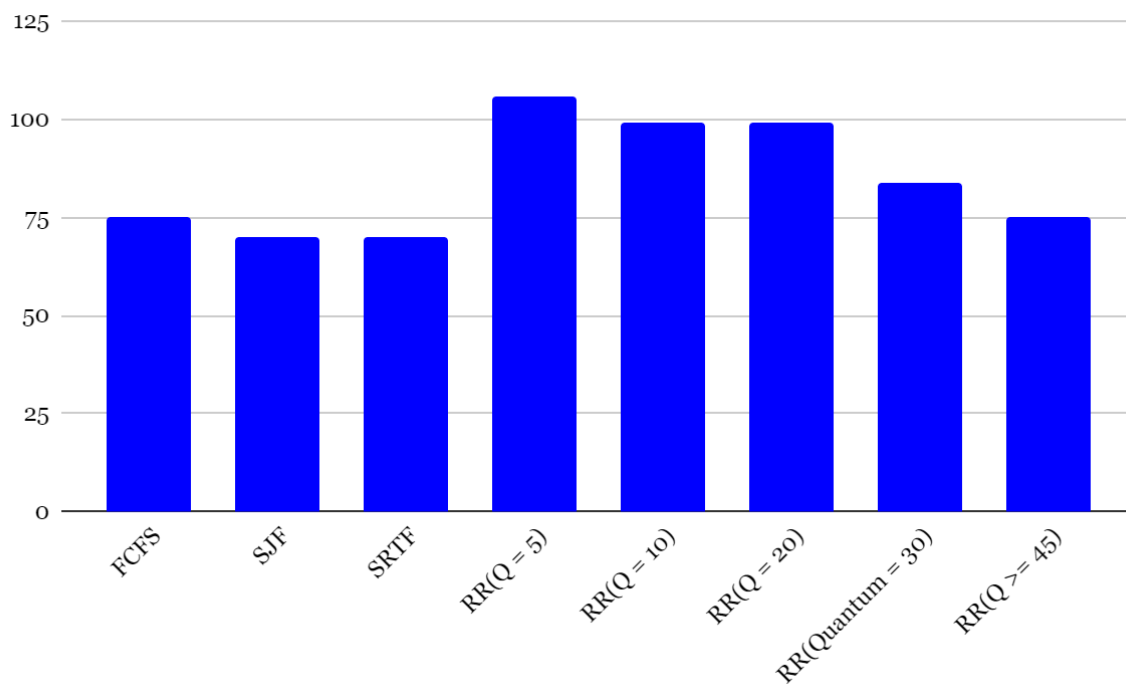


Figure 1: Comparison Chart of Scheduling Algorithms

As we can see from the graph, as the quantum time increases Round Robin algorithm behaves exactly like FCFS. Even though average turnaround times are equal, Round Robin provides better response time compared to FCFS.