1. FCFS (First Come First Served)

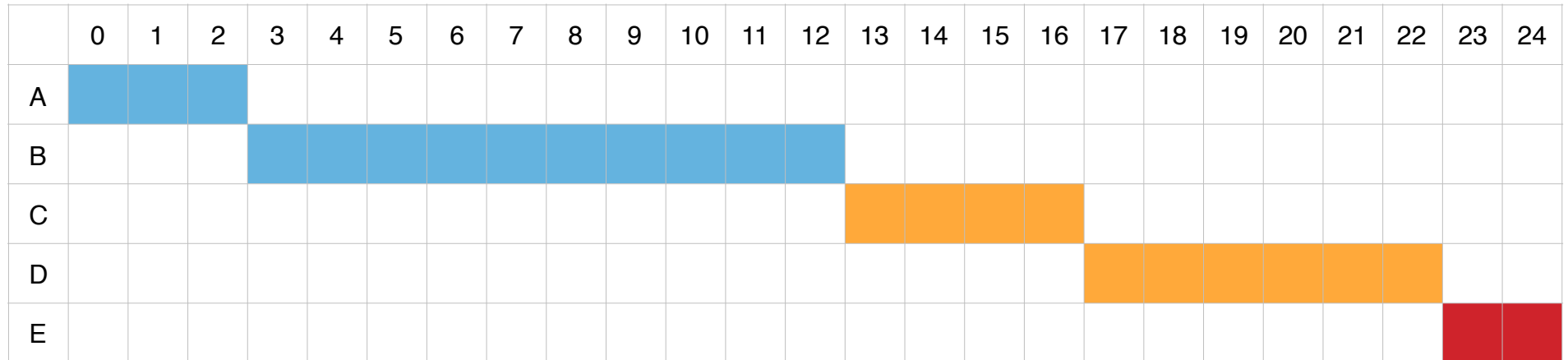|	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A																									
B																									
C																									
D																									
E																									

🔵 Priority 1   🟠 Priority 2   🔴 Priority 3

In the „First Come First Served" Scheduling algorithm, it is not important what priority a task has but when he arrives. It is sort of like a queue.
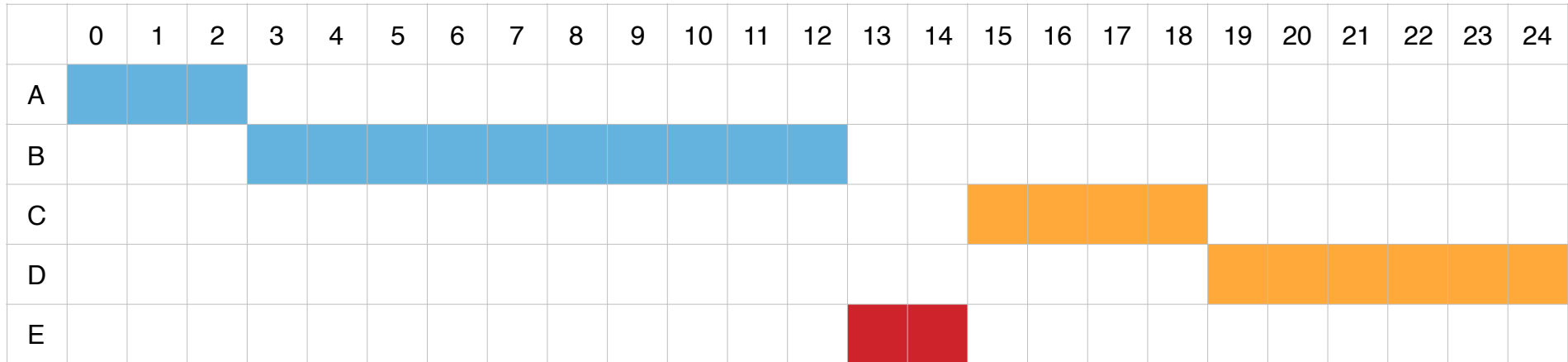
Turnaround Time:

A = 2
B = 9
C = 11
D = 16
E = 16

Response Time:

A = 0
B = 0
C = 8
D = 11
E = 15

Troughput: 0.20

2. SPN (Shortest Process Next)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	█	█	█																						
B				█	█	█	█	█	█	█	█	█	█												
C																█	█	█	█						
D																				█	█	█	█	█	█
E														█	█										

🔵 Priority 1   🟠 Priority 2   🔴 Priority 3

In the „Shortest Process Next" Scheduler the service time is really important. The compiler checks, whenever a process is finished, if there are any processes available, and executes those, which have the least service time.
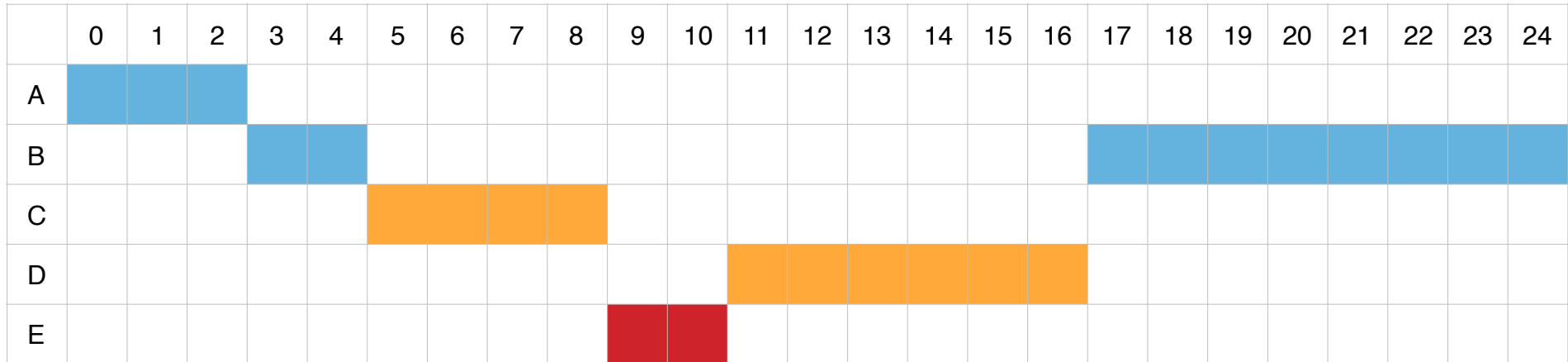
Turnaround Time:

A = 2
B = 9
C = 13
D = 18
E = 6

Response Time:

A = 0
B = 0
C = 10
D = 13
E = 5

Troughput: 0.20

3. SRT (Shortest Remaining Time Next)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A																									
B																									
C																									
D																									
E																									

🔵 Priority 1   🟠 Priority 2   🔴 Priority 3

In the „Shortest Remaining Time Next" Scheduler the service time is again really important. The compiler checks every quantum if there are any processes available, and executes those, which have the least service time.
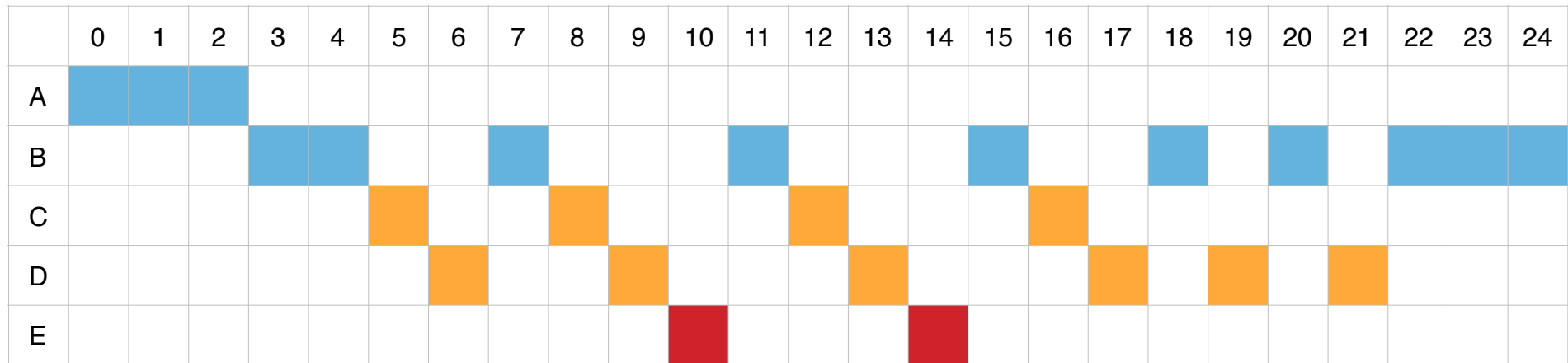
Turnaround Time:

A = 2
B = 21
C = 3
D = 10
E = 2

Response Time:

A = 0
B = 0
C = 0
D = 5
E = 1

Troughput: 0.20

4. Round Robin (quantum = 1)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

- 🔵 Priority 1
- 🟠 Priority 2
- 🔴 Priority 3

In the „Round Robin" scheduler the compiler changes the process every quantum unit (in this case 1) and goes along until all processes are finished. If one process gets finished before another one, it just continues with the rest.
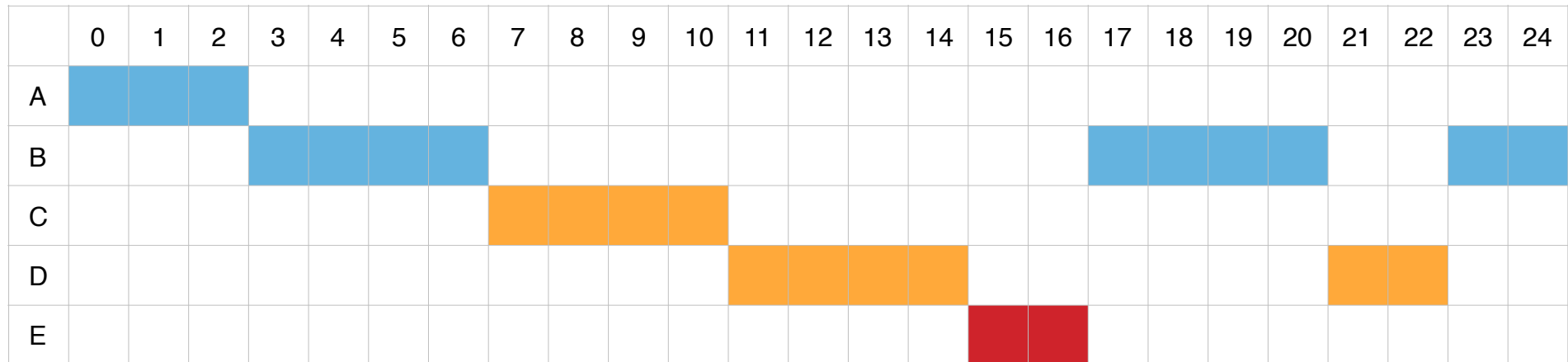
Turnaround Time:

A = 2
B = 21
C = 11
D = 15
E = 6

Response Time:

A = 0
B = 0
C = 0
D = 0
E = 2

Troughput: 0.20

5. Round Robin (quantum = 4)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	■	■	■																						
B				■	■	■	■											■	■	■	■			■	■
C								■	■	■	■														
D												■	■	■	■							■	■		
E																■	■								

● Priority 1   ● Priority 2   ● Priority 3

In the „Round Robin" scheduler the compiler changes the process every quantum unit (in this case 4) and goes along until all processes are finished. If one process gets finished before another one it just continues with the rest.
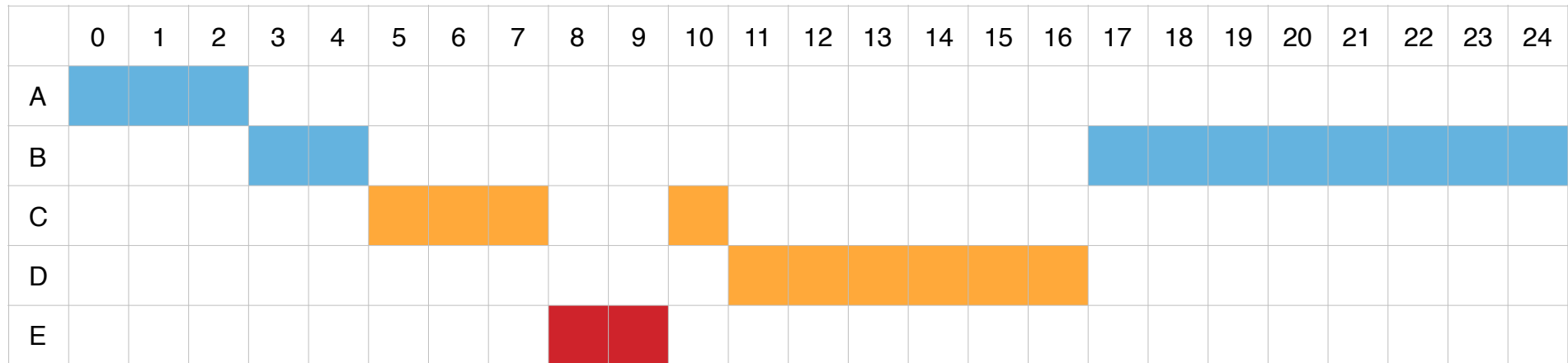
Turnaround Time:

A = 2
B = 21
C = 5
D = 16
E = 8

Response Time:

A = 0
B = 0
C = 2
D = 5
E = 7

Troughput: 0.20

6. Highest Priority First with preemption

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	■	■																							
B				■	■													■	■	■	■	■	■	■	■
C						■	■	■			■														
D												■	■	■	■	■	■								
E									■	■															

● Priority 1   ● Priority 2   ● Priority 3

In the „Highest Priority First with preemption" scheduler the compiler looks for the process with the highest priority and also stops every quantum and checks if there is another process with a bigger priority then the current one. Whenever one is finished it continues with the the current biggest priority process.
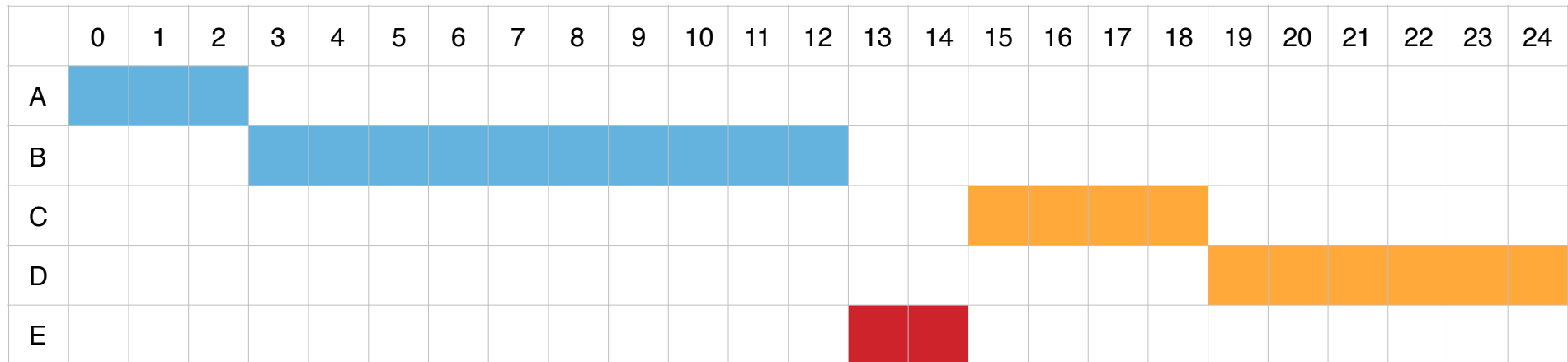
Turnaround Time:

A = 2
B = 21
C = 5
D = 10
E = 1

Response Time:

A = 0
B = 0
C = 0
D = 5
E = 0

Troughput: 0.20

7. Highest Priority First without preemption

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	■	■																							
B				■	■	■	■	■	■	■	■	■	■												
C																■	■	■							
D																				■	■	■	■	■	■
E														■	■										

● Priority 1   ● Priority 2   ● Priority 3

In the „Highest Priority First without preemption" scheduler the compiler also looks for the process with the highest priority and only stops if the current process is finished. When one is finished it continues with the the current biggest priority process.

Turnaround Time:

A = 2
B = 9
C = 13
D = 18
E = 6

Response Time:

A = 0
B = 0
C = 10
D = 13
E = 5

Troughput: 0.20