

Assume that we have 3 processes with the following info:

Process out1 (P1):

Arrival Time: 0

Execution Time: 5 sec

Process out2 (P2):

Arrival Time: 3

Execution Time: 4 sec

Process out3 (P3):

Arrival Time: 7

Execution Time: 3 sec

Assume that we have a very simple scheduler without preemption CPU scheduler which allocates CPU to the processes in the queue one by one. Starts a process in the queue, executes it, wait until it terminates, then takes the next process in queue, and so on. While a process is running, it is not preempted even another process comes to the Ready Queue (no preemption).

We can track the execution of the processes as:

Time 0: process out1 arrived

Time 0: process out1 started (waiting time=0)

Time 3: process out2 arrived

Time 5: process out1 completed

Time 5: process out2 started (waiting time=2)

...

Or we can draw a time table to visualize:

0	1	2	3	4	5	6	7	8	9	10	11	12
P1 is running					P2 is running				P3 is running			
			<i>P2 is waiting</i>				<i>P3 is waiting</i>					

Waiting Time for each process: (termination time - execution time - arrival time)

Waiting Time for P1: 0 (5 - 5 - 0)

Waiting Time for P2: 2 (9 - 4 - 3)

Waiting Time for P3: 2 (12 - 3 - 8)