

SRR Example

- i. Consider the following set of processes, with the length of the CPU burst time given in milliseconds:

Process	Service Required/ms	Arrival_Time /ms
P1	6	0
P2	5	1
P3	4	3
P4	2	4

Draw out the sequence for the **Selfish Round Robin scheduling algorithm**, from time 0 until all the listed processes have completed.

Show the queue structures and the position, the status, and NUT value for each process for each time slot.

Let the priority increment for the new queue be set to 2 and for the accepted queue set to 1.

Assume the quanta level is set to 1 millisecond and that new processes arriving will be allocated just before the timing interrupt occurs.

T=0 New-Q	Accpt-Q P1(R)(5)(1)	T=1 New-Q	Accpt-Q P2(W)(5)(2) P1(R)(4)(2)	T=2 New-Q	Accpt-Q P2(R)(4)(3) P1(w)(4)(3)	T=3 New-Q	Accpt-Q P3(W)(4)(2) P1(R)(3)(4) P2(w)(4)(4)	T=4 New-Q	Accpt-Q P3(W)(4)(4) P2(R)(3)(5) P4(W)(2)(2) P1(w)(3)(5)
T=5 New-Q P3(W)(4)(6) P4(W)(2)(4)	Accpt-Q P1(R)(2)(6) P2(w)(3)(6)	T=6 New-Q P4(W)(2)(6)	Accpt-Q P2(R)(2)(7) P3(W)(4)(7) P1(w)(2)(7)	T=7 New-Q P4(W)(2)(8)	Accpt-Q P3(R)(3)(8) P1(W)(2)(8) P2(W)(2)(8)	T=8 New-Q	Accpt-Q P1(R)(1)(9) P2(W)(2)(9) P4(W)(2)(9) P3(W)(3)(9)	T=9 New-Q	Accpt-Q P2(R)(1)(10) P4(W)(2)(10) P3(W)(3)(10) P1(W)(1)(10)
T=10 New-Q	Accpt-Q P4(R)(1)(11) P3(W)(3)(11) P1(W)(1)(11) P2(W)(1)(11)	T=11 New-Q	Accpt-Q P3(R)(2)(12) P1(W)(1)(12) P2(W)(1)(12) P4(W)(1)(12)	T=12 New-Q	Accpt-Q P1(R)(0)(13) P2(W)(1)(13) P4(W)(1)(13) P3(W)(2)(13)	T=13 New-Q	Accpt-Q P2(R)(0)(14) P4(W)(1)(13) P3(W)(2)(13)	T=14 New-Q	Accpt-Q P4(R)(0)(15) P3(W)(2)(15)
T=15 New-Q	Accpt-Q P3(R)(1)(16)	T=16 New-Q	Accpt-Q P3(R)(0)(17)	T=17 New-Q	Accpt-Q				

Output from Script

charalg@compute0:~/L7SDE23/WK\$./SRR.sh data 2 1

right no of parameters entered 3

digit match

data data file entered.

A 6 0

B 5 1

C 4 3

D 2 4

Priority Increment in New_Queue = 2 and in Accepted_Queue = 1

T	A	B	C	D
0	R	-	-	-
1	R	W	-	-
2	W	R	-	-
3	R	W	W	-
4	W	R	W	W

5	R	W	W	W
6	W	R	W	W
7	W	W	R	W
8	R	W	W	W
9	W	R	W	W
10	W	W	W	R
11	W	W	R	W
12	R	W	W	W
13	F	R	W	W
14	F	F	W	R
15	F	F	R	F
16	F	F	R	F
17	F	F	F	F