

Task 1.1: (50%): Do the hand simulation until MC = 50.

MC	RTCL	Non- RTCL	nRT	nonRT	SCL	Server status, n	Pre-empted service time
0	3	5	0	0	4	2	
3	13	5	0	1	5	1	s=1
5	13	10	0	2	5	1	s=1
5	13	10	0	1	6	2	s=0
6	13	10	0	0	10	2	s=0
10	13	15	0	0	14	2	s=0
13	23	15	0	1	15	1	s=1
15	23	20	0	2	15	1	s=1
15	23	20	0	1	16	2	s=0
16	23	20	0	0	20	2	s=0
20	23	25	0	0	24	2	s=0
23	33	25	0	1	25	1	s=1
25	33	30	0	2	25	1	s=1
25	33	30	0	1	26	2	s=0
26	33	30	0	0	30	2	s=0
30	33	35	0	0	34	2	s=0
33	43	35	0	1	35	1	s=1
35	43	40	0	2	35	1	s=1
35	43	40	0	1	36	2	s=0
36	43	40	0	0	40	2	s=0
40	43	45	0	0	44	2	s=0
43	53	45	0	1	45	1	s=1
45	53	50	0	2	45	1	s=1
45	53	50	0	1	46	2	s=0
46	53	50	0	0	50	2	s=0
50	53	55	0	0	54	2	s=0

Task 1.2 (50%): Do the hand simulation until MC = 20, but now reverse the input parameters as follows. The inter-arrival time of RT messages is constant = 5, the inter-arrival time of nonRT is constant = 10, the service time of an RT message is constant = 4, and the service time of a nonRT message is constant = 2. Use the same initial conditions.

MC	RTCL	Non- RTCL	nRT	nonRT	SCL	Server status, n	Pre-empted service time
0	3	5	0	0	4	2	
3	8	5	0	1	7	1	s=1
5	8	15	0	2	7	1	s=1
7	8	15	0	1	8	2	s=0
8	13	15	0	1	12	1	s=0
12	13	15	0	0	14	2	s=0
13	18	15	0	1	17	1	s=1
15	18	25	0	2	17	1	s=1
17	18	25	0	1	18	2	s=0
18	23	25	0	1	22	1	s=0
22	23	25	0	0	24	2	s=0