

5000	8000	12000
5001	8001	12001
5002	8002	12002
5003	8003	12003
5004		12004
5005		12005
5006		12006
5007		12007
5008		12008
5009		12009
5010		12010
5011		12011

**(a) Trace of Process A**

**(b) Trace of Process B**

**(c) Trace of Process C**

5000 = Starting address of program of Process A  
8000 = Starting address of program of Process B  
12000 = Starting address of program of Process C

**Figure 3.2 Traces of Processes of Figure 3.1**

1	5000		
2	5001		
3	5002		
4	5003		
5	5004		
6	5005		
		-----	Time out
7	100		
8	101		
9	102		
10	103		
11	104		
12	105		
13	8000		
14	8001		
15	8002		
16	8003		
		-----	I/O request
17	100		
18	101		
19	102		
20	103		
21	104		
22	105		
23	12000		
24	12001		
25	12002		
26	12003		
27	12004		
28	12005		
		-----	Time out
29	100		
30	101		
31	102		
32	103		
33	104		
34	105		
35	5006		
36	5007		
37	5008		
38	5009		
39	5010		
40	5011		
		-----	Time out
41	100		
42	101		
43	102		
44	103		
45	104		
46	105		
47	12006		
48	12007		
49	12008		
50	12009		
51	12010		
52	12011		
		-----	Time out

100 = Starting address of dispatcher program

shaded areas indicate execution of dispatcher process;  
 first and third columns count instruction cycles;  
 second and fourth columns show address of instruction being executed

**Figure 3.3 Combined Trace of Processes of Figure 3.1**