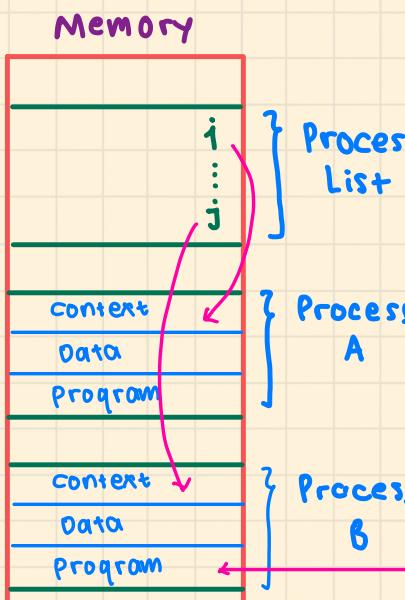


# Process and Control

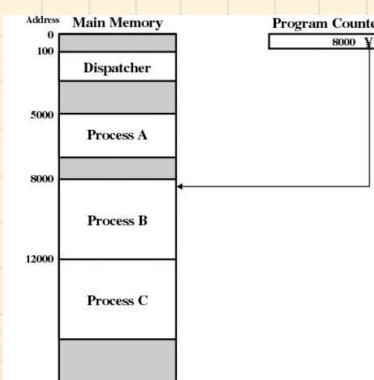
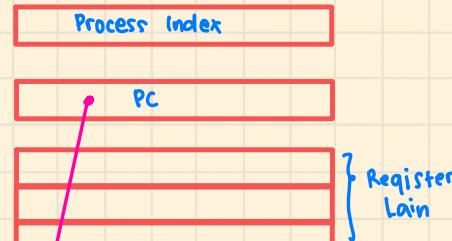
## Process

Sebuah eksekusi program ; bisa di lacak (alamatnya)

Memory process



## Processor Register



(a) Trace of Process A

(b) Trace of Process B

(c) Trace of Process C

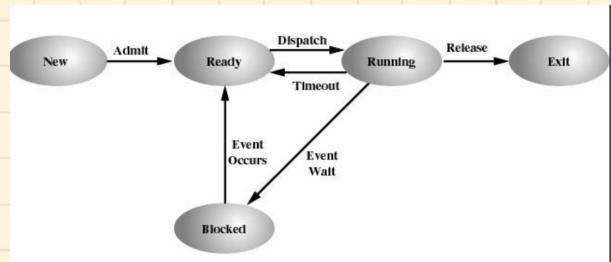
5000 = Starting address of program of Process A  
8000 = Starting address of program of Process B  
12000 = Starting address of program of Process C

1	5000		
2	5001		
3	5002		
4	5003		
5	5004		
6	5005		
7	100		
8	101		
9	102		
10	103		
11	104		
12	105		
13	8000		
14	8001		
15	8002		
16	8003		
17	100		
18	101		
19	102		
20	103		
21	104		
22	105		
23	12000		
24	12001		
25	12002		
26	12003		
27	12004		
28	12005		
29	100	Time out	
30	101		
31	102		
32	103		
33	104		
34	105		
35	5006		
36	5007		
37	5008		
38	5009		
39	5010		
40	5011		
41	100	Time out	
42	101		
43	102		
44	103		
45	104		
46	105		
47	12006		
48	12007		
49	12008		
50	12009		
51	12010		
52	12011		
53	12012	Time out	
54	12013		
55	12014		
56	12015		
57	12016		
58	12017		
59	12018		
60	12019		
61	12020		
62	12021		
63	12022		
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65	12024		
66	12025		
67	12026		
68	12027		
69	12028		
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79	12038		
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81	12040		
82	12041		
83	12042		
84	12043		
85	12044		
86	12045		
87	12046		
88	12047		
89	12048		
90	12049		
91	12050		
92	12051		
93	12052		
94	12053		
95	12054		
96	12055		
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101	12060		
102	12061		
103	12062		
104	12063		
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138	12097		
139	12098		
140	12099		
141	12100		
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304	12263		
305	12264		
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349	12308		
350	12309		
351	12310		

## Five State Process

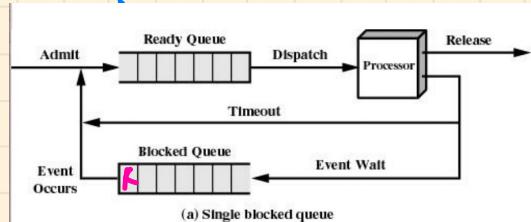
terdiri atas 5 state:

- Running (diproses)
- Ready (siap di proses)
- Blocked (menunggu I/O)
- New (memasukkan proses baru)
- Exit (proses selesai)

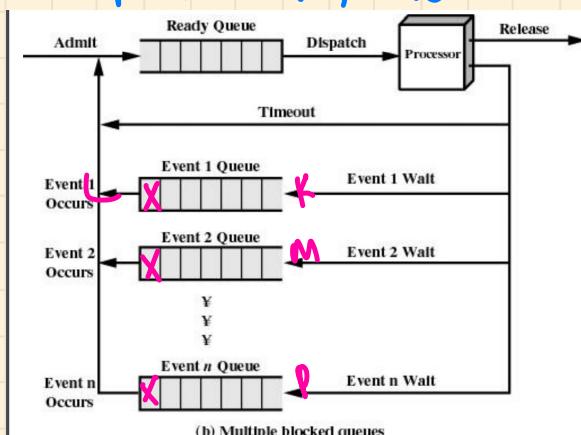


Berikut antrian pada ready dan blocked:

### a. Single Block queue



### b. Multiple blocked queue



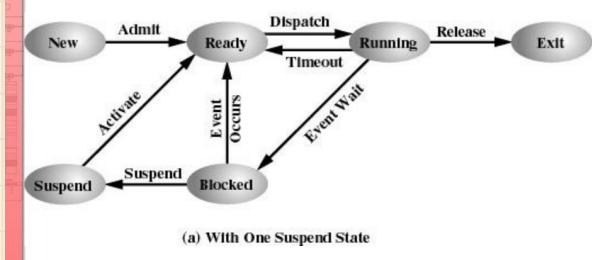
## Suspended Process

Suspension adalah proses yang dipindahkan ke external memory agar main memory lebih luang. Biasanya karena nunggu I/O ngaret.

terdiri atas 6/7 state:

- Running (diproses)
- Ready (siap di proses)
- Blocked (menunggu I/O)
- New (memasukkan proses baru)
- Exit (proses selesai)
- Ready / Suspend (ready namun di ext. memory) *yg atau suspend saja*
- Blocked / Suspend (blocked *——————||—————*)

## \* Suspend Only



## \*\* Ready/suspend and blocked/suspend

