

Round Robin Sim

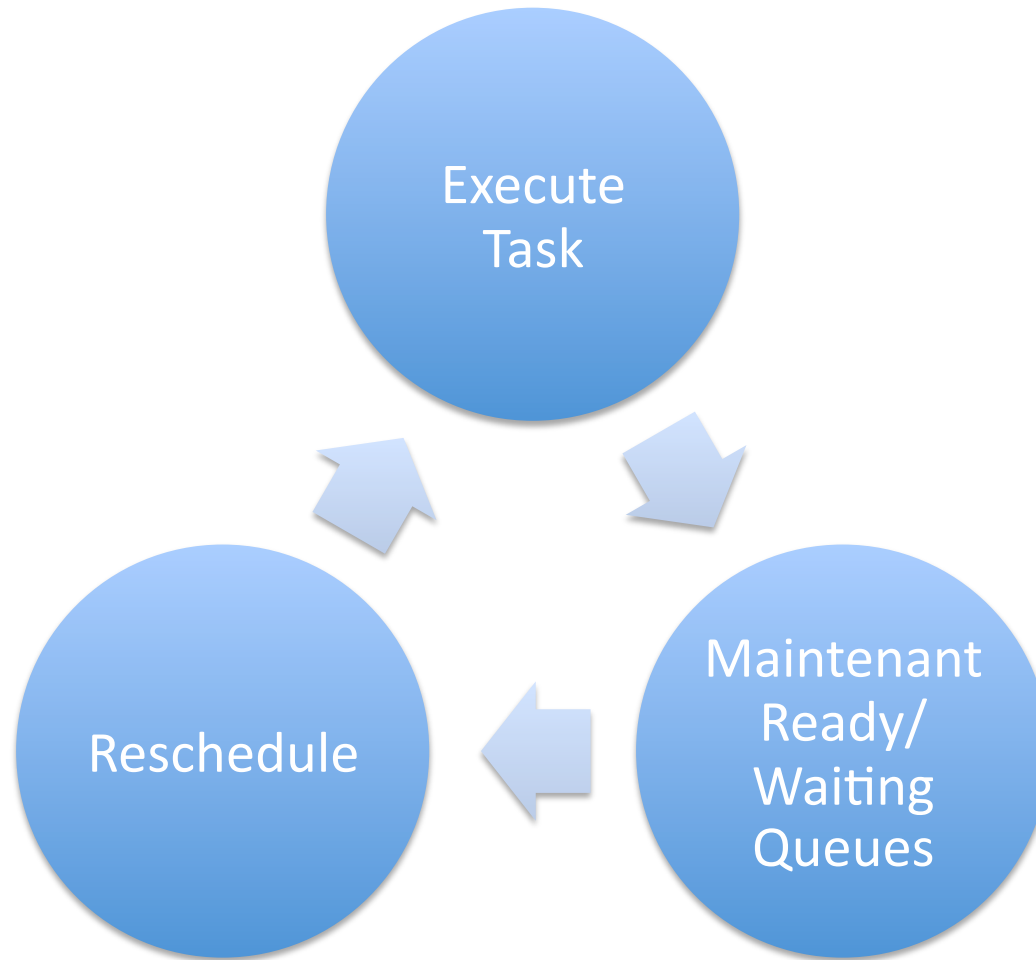
Round Robin Sim

- How does it work?
 - Preemption
 - Time Quantum
 - Queues

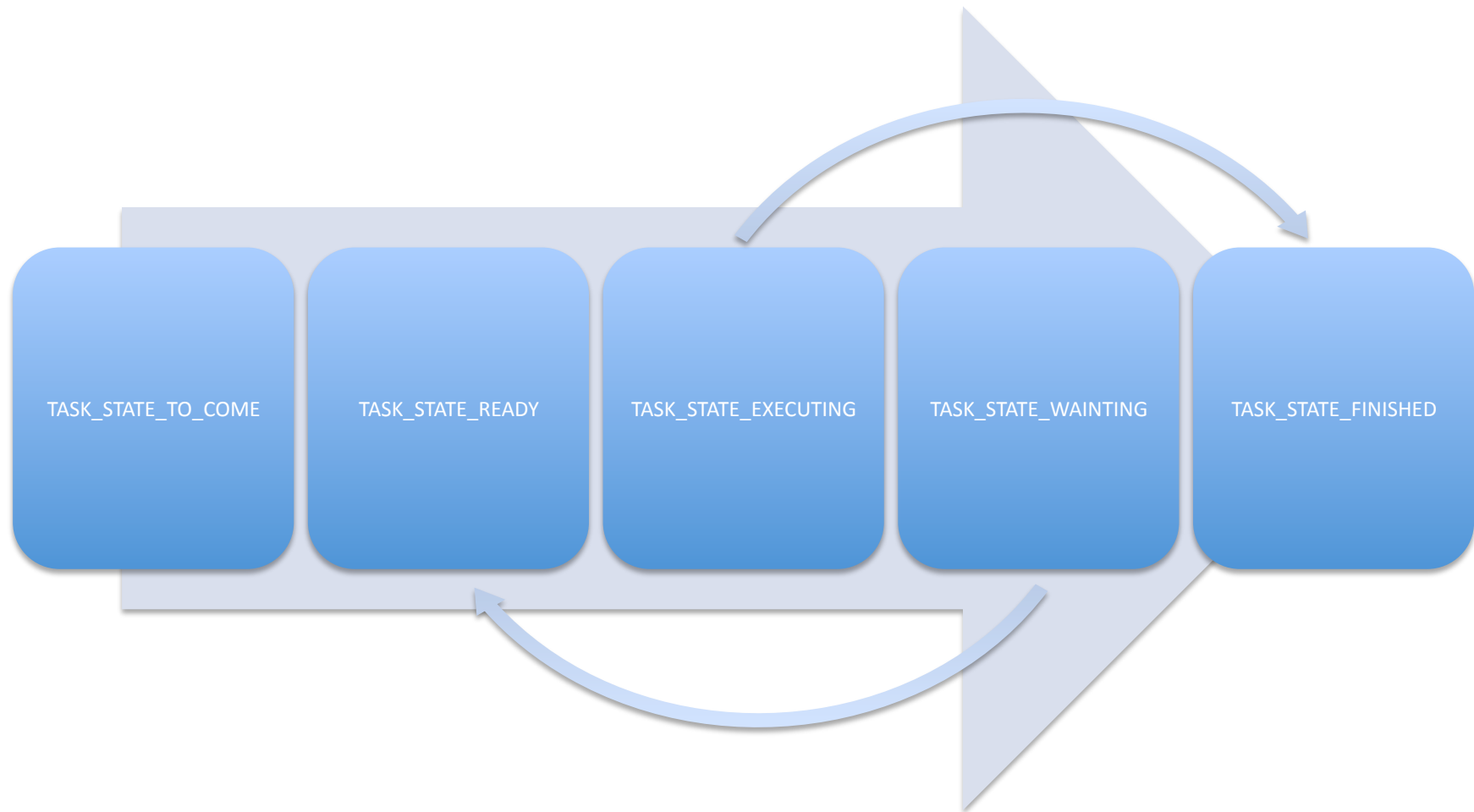
Round Robin Sim

- How was it solved?
 - C
 - Lots of pointers

Round Robin Sim



Round Robin Sim



Round Robin Sim

- Structures Used

```
struct _task {  
    int priority;  
    int state;  
    int task_number;  
    int time_to_come;  
    int process_time;  
    int waiting_time;  
    int sleep_time;  
    instruction_t *instruction;  
    instruction_t *curr_instruction;  
    task_t *next;  
};
```

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- Structures Used

```
typedef struct _instruction instruction_t;
struct _instruction {
    int duration;
    int instruction_type;
    instruction_t *next;
};

typedef struct _queue queue_t;
struct _queue {
    task_t *task;
    queue_t *previous;
    queue_t *next;
};
```

procs:	P0	P1	P2
0	-	-	E
1	-	-	E
2	-	R	E
3	-	E	W
4	-	E	W
5	R	E	R
6	E	W	R
7	E	W	R
8	E	W	R
9	W	W	E
10	W	R	E
11	R	R	E
12	R	R	E
13	R	R	E
14	R	E	W

15	R	E	R
16	E	W	R
17	E	W	R
18	E	W	R
19	E	W	R
20	E	W	R
21	W	R	E
22	R	E	F
23	E	F	F
24	E	F	F
25	E	F	F
26	E	F	F
27	E	F	F
CPU:	13	6	9
wait:	7	6	10
sleep:	3	9	3

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- Q/A?