OS Term Project #2 Report

- FCFS, SRTF, RR Simulator -

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FCFS, SRTF, RR 스케줄러 과정을 나타내는 프로그램은 C++로 작성하였으며, 총 3개의 Class로 구성되어 있다.

1. 결과 값

FCFS Scheduler Average Waiting Time : 13.5 ms
SRTF Scheduler Average Waiting Time : 9.5 ms
RR Scheduler Average Waiting Time : 22.1667 ms

2. 프로그램 동작 과정

```
dykoon ~/WorkSpace/FCFS, SRTF, RR Simulator/src
./a.out


       ---ID -- Command -----
          1 : FCFS Scheduler
          2 : SRTF Scheduler
          3 : RR Scheduler
          0 : Quit

        Choose a Command-->
```

< 콘솔 초기 화면>

```
       ---ID -- Command -----
          1 : FCFS Scheduler
          2 : SRTF Scheduler
          3 : RR Scheduler
          0 : Quit

        Choose a Command--> 1

Scheduler : FCFS

0 - 1ms - current Process : Process1
1 - 2ms - current Process : Process1
2 - 3ms - current Process : Process1
3 - 4ms - current Process : Process1
4 - 5ms - current Process : Process1
5 - 6ms - current Process : Process1
6 - 7ms - current Process : Process1
7 - 8ms - current Process : Process1
8 - 9ms - current Process : Process1
9 - 10ms - current Process : Process1
10 - 11ms - current Process : Process2
11 - 12ms - current Process : Process2
12 - 13ms - current Process : Process2
13 - 14ms - current Process : Process2
14 - 15ms - current Process : Process2
15 - 16ms - current Process : Process2
16 - 17ms - current Process : Process2
17 - 18ms - current Process : Process2
18 - 19ms - current Process : Process2
19 - 20ms - current Process : Process2
20 - 21ms - current Process : Process2
21 - 22ms - current Process : Process2
22 - 23ms - current Process : Process3
23 - 24ms - current Process : Process3
24 - 25ms - current Process : Process3
25 - 26ms - current Process : Process3
26 - 27ms - current Process : Process4
27 - 28ms - current Process : Process4
28 - 29ms - current Process : Process4
29 - 30ms - current Process : Process4
30 - 31ms - current Process : Process4
31 - 32ms - current Process : Process4
32 - 33ms - current Process : Process5
33 - 34ms - current Process : Process5
34 - 35ms - current Process : Process5
35 - 36ms - current Process : Process5
36 - 37ms - current Process : Process5
37 - 38ms - current Process : Process5
38 - 39ms - current Process : Process5
39 - 40ms - current Process : Process5
40 - 41ms - current Process : Process6
41 - 42ms - current Process : Process6
42 - 43ms - current Process : Process6
43 - 44ms - current Process : Process6
44 - 45ms - current Process : Process6
45 - 46ms - current Process : Process6
46 - 47ms - current Process : Process6
Average Waiting Time : 13.5
========================================
```

<FCFS Scheduler>

```
        ---ID -- Command -----
           1 : FCFS Scheduler
           2 : SRTF Scheduler
           3 : RR Scheduler
           0 : Quit

         Choose a Command--> 2

Scheduler : SRTF

0 - 1ms - current Process : Process1
1 - 2ms - current Process : Process1
2 - 3ms - current Process : Process1
3 - 4ms - current Process : Process1
4 - 5ms - current Process : Process1
5 - 6ms - current Process : Process1
6 - 7ms - current Process : Process1
7 - 8ms - current Process : Process1
8 - 9ms - current Process : Process1
9 - 10ms - current Process : Process1
10 - 11ms - current Process : Process3
11 - 12ms - current Process : Process3
12 - 13ms - current Process : Process3
13 - 14ms - current Process : Process3
14 - 15ms - current Process : Process4
15 - 16ms - current Process : Process4
16 - 17ms - current Process : Process4
17 - 18ms - current Process : Process4
18 - 19ms - current Process : Process4
19 - 20ms - current Process : Process4
20 - 21ms - current Process : Process6
21 - 22ms - current Process : Process6
22 - 23ms - current Process : Process6
23 - 24ms - current Process : Process6
24 - 25ms - current Process : Process6
25 - 26ms - current Process : Process6
26 - 27ms - current Process : Process6
27 - 28ms - current Process : Process5
28 - 29ms - current Process : Process5
29 - 30ms - current Process : Process5
30 - 31ms - current Process : Process5
31 - 32ms - current Process : Process5
32 - 33ms - current Process : Process5
33 - 34ms - current Process : Process5
34 - 35ms - current Process : Process5
35 - 36ms - current Process : Process2
36 - 37ms - current Process : Process2
37 - 38ms - current Process : Process2
38 - 39ms - current Process : Process2
39 - 40ms - current Process : Process2
40 - 41ms - current Process : Process2
41 - 42ms - current Process : Process2
42 - 43ms - current Process : Process2
43 - 44ms - current Process : Process2
44 - 45ms - current Process : Process2
45 - 46ms - current Process : Process2
46 - 47ms - current Process : Process2
Average Waiting Time : 9.5
================================================
```

<SRTF Scheduler>

```
        ---ID -- Command -----
           1 : FCFS Scheduler
           2 : SRTF Scheduler
           3 : RR Scheduler
           0 : Quit

         Choose a Command--> 3

Scheduler : RR

0 - 1ms - current Process : Process1
1 - 2ms - current Process : Process1
2 - 3ms - current Process : Process1
3 - 4ms - current Process : Process2
4 - 5ms - current Process : Process2
5 - 6ms - current Process : Process2
6 - 7ms - current Process : Process1
7 - 8ms - current Process : Process1
8 - 9ms - current Process : Process1
9 - 10ms - current Process : Process2
10 - 11ms - current Process : Process2
11 - 12ms - current Process : Process2
12 - 13ms - current Process : Process3
13 - 14ms - current Process : Process3
14 - 15ms - current Process : Process3
15 - 16ms - current Process : Process1
16 - 17ms - current Process : Process1
17 - 18ms - current Process : Process1
18 - 19ms - current Process : Process4
19 - 20ms - current Process : Process4
20 - 21ms - current Process : Process4
21 - 22ms - current Process : Process2
22 - 23ms - current Process : Process2
23 - 24ms - current Process : Process2
24 - 25ms - current Process : Process5
25 - 26ms - current Process : Process5
26 - 27ms - current Process : Process5
27 - 28ms - current Process : Process6
28 - 29ms - current Process : Process6
29 - 30ms - current Process : Process6
30 - 31ms - current Process : Process3
31 - 32ms - current Process : Process1
32 - 33ms - current Process : Process4
33 - 34ms - current Process : Process4
34 - 35ms - current Process : Process4
35 - 36ms - current Process : Process2
36 - 37ms - current Process : Process2
37 - 38ms - current Process : Process2
38 - 39ms - current Process : Process5
39 - 40ms - current Process : Process5
40 - 41ms - current Process : Process5
41 - 42ms - current Process : Process6
42 - 43ms - current Process : Process6
43 - 44ms - current Process : Process6
44 - 45ms - current Process : Process5
45 - 46ms - current Process : Process5
46 - 47ms - current Process : Process6
Average Waiting Time : 22.1667
================================================
```

<RR Scheduler>