7. Appendix: about input file and output information by CPU scheduling simulator

for FCFS, RR, and SRTF

```
% more input.1
1
   0
        10
2
    0
        9
3
    3 5
4
    7
        4
5
   10 6
6
   10
         7
% proj2
Usage: proj2 input_file FCFS|RR|SRJF [quantum]
% proj2 input.1 FCFS
Schdeuling algorithm: FCFS
Total 6 tasks are read from "input.1". press 'enter' to start...
_____
<system time 0> process 1 is running
<system time 1> process 1 is running
<system time 2> process 1 is running
<system time 3> process 1 is running
                 3> process
<system time 4> process 1 is running
<system time 5> process 1 is running
<system time 6> process 1 is running
<system time 7> process 1 is running
<system time 8> process 1 is running
<system time
                9> process 1 is running
10> process 1 is finished......
<system time 10> process 1 is finished
<system time 10> process 2 is running
<system time 11> process 2 is running
               12> process 2 is running
13> process 2 is running
<system time
<system time
<system time 14> process 2 is running
<system time 15> process 2 is running
<svstem time 16> process 2 is running
<system time 17> process 2 is running
<system time 18> process 2 is running
<system time
                19> process 2 is finished.....
19> process 3 is running
<system time
<system time 20> process 3 is running
<system time 21> process 3 is running
<system time 22> process 3 is running
<system time 22> process 3 is running
<system time 23> process 3 is running
<system time
                 24> process 3 is finished.....
<system time
                 24> process 4 is running
25> process 4 is running
<system time
<system time 26> process 4 is running
                 27> process 4 is running
28> process 4 is finished.....
<system time
<system time 28> process 4 is finished
<system time 28> process 5 is running
<system time
                 29> process 5 is running
                 30> process 5 is running
31> process 5 is running
<system time
<system time
<system time 32> process 5 is running
<system time 33> process 5 is running
<system time 34> process 5 is finished......
<system time 34> process 6 is running
<system time 35> process 6 is running
               36> process 6 is running
37> process 6 is running
<svstem time
<system time
<system time 38> process 6 is running
<system time 39> process 6 is running
                40> process6 is running41> process6 is finished.....
<system time
<system time
<system time
                41> All processes finish .....
```

: 100.00 % Avarage cpu usage Avarage waiting time : 14.17 Avarage response time : 14.17 Avarage turnaround time: 21.00 % proj2 input.1 RR 2 Schdeuling algorithm: RR Total 6 tasks are read from "input.1". press 'enter' to start... _____ <system time 0> process 1 is running <system time 1> process 1 is running
<system time 2> process 2 is running <system time 3> process 2 is running <system time 4> process 1 is running <system time 5> process 1 is running <system time 6> process 3 is running <system time 7> process 3 is running 8> process <system time 2 is running 2 is running 9> process <system time <system time 10> process 1 is running <system time 11> process 1 is running <system time 12> process 4 is running <system time 13> process 4 is running <system time 14> process 3 is running <system time 15> process 3 is running <system time 16> process 5 is running <system time 17> process 5 is running <system time 18> process 6 is running 19> process 6 is running <system time <system time 20> process 2 is running 2 is running <system time 21> process 22> process 1 is running 23> process 1 is running <system time 23> process <svstem time 24> process 4 is running <system time <system time 25> process 4 is running <system time 26> process 4 is finished..... <system time 26> process 3 is running <system time 27> process 3 is finished..... <system time 27> process 5 is running
<system time 28> process 5 is running 28> process <system time <system time 29> process 6 is running 30> process 6 is running <system time <system time 31> process 2 is running <system time 32> process 2 is running <system time 33> process 1 is running <system time 34> process <system time 35> process 1 is running 1 is finished..... <system time 35> process 5 is running <system time 36> process 5 is running <system time 37> process 5 is finished
<system time 37> process 6 is running 5 is finished..... <system time 38> process 6 is running 39> process 2 is running 40> process 2 is finished...... <system time <system time 40> process 6 is running <system time 41> process <system time 6 is finished..... 41> All processes finish <system time Avarage cpu usage : 100.00 % Avarage waiting time : 22.50 Avarage response time : 4.00 Avarage turnaround time: 29.33 _____ % proj2 input.1 SRTF Schdeuling algorithm: SRTF Total 6 tasks are read from "input.1". press 'enter' to start... _____

<system< td=""><td>time</td><td>0></td><td>process</td><td>2</td><td>is</td><td>running</td></system<>	time	0>	process	2	is	running
<system< td=""><td>time</td><td>1></td><td>process</td><td>2</td><td>is</td><td>running</td></system<>	time	1>	process	2	is	running
<system< td=""><td>time</td><td>2></td><td>process</td><td>2</td><td>is</td><td>running</td></system<>	time	2>	process	2	is	running
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<system< td=""><td>time</td><td>4></td><td>process</td><td>3</td><td>is</td><td>running</td></system<>	time	4>	process	3	is	running
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<svstem< td=""><td></td><td></td><td>process</td><td>3</td><td>is</td><td>running</td></svstem<>			process	3	is	running
<system< td=""><td>time</td><td></td><td>process</td><td>3</td><td>is</td><td>finished</td></system<>	time		process	3	is	finished
<system< td=""><td></td><td></td><td>process</td><td></td><td></td><td>running</td></system<>			process			running
<system< td=""><td></td><td></td><td>process</td><td></td><td></td><td>running</td></system<>			process			running
<system< td=""><td></td><td>10></td><td>process</td><td>4</td><td>is</td><td>running</td></system<>		10>	process	4	is	running
<system< td=""><td>time</td><td>11></td><td>process</td><td>4</td><td>is</td><td>running</td></system<>	time	11>	process	4	is	running
<system< td=""><td></td><td></td><td>process</td><td></td><td></td><td>finished</td></system<>			process			finished
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<system< td=""><td>time</td><td>13></td><td>process</td><td>2</td><td>is</td><td>running</td></system<>	time	13>	process	2	is	running
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2			1			
	e cpu usage : 100.00 %					
2	waiting time : 10.50					
	response time : 9.00					
2	turnaround time: 17.33					