King Saud University
College of Computer and Information Sciences
Computer Science Department

Second Semester 1445

CSC227

Operating Systems

Group#3		
Students		
Name	***ID***	***Section***
ريما التويجري	***443200635***	**74586**
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نوره الثبيتي	***443200880***	
ساره السليمي		
رغد القحطاني		

I. task distribution.

task distribution.				
ريما التويجري	نوف الوكيل	نورة الثبيتي	ساره السليمي	رغد القحطاني
Process Control Block class +writing the Report method	**Main menu +report**	**Main menu+ enters processes information method**	**Queue 1 RR**	**Queue 2 SJF**

II. Student peer evaluation

Team Work					
Criteria	**ريما التويجري**	**نوف الوكيل**	**نورة الثبيتي**	**ساره** السليمي	**رغد القحطاني**
Work division: Contributed equally to the work	1	1	1	1	1
Peer evaluation: Level of commitments (Interactivity with other team members), and professional behavior towards team & TA	1	1	1	1	1
Project Discussion: Accurate answers, understanding of the presented work, good listeners to questions	1	1	1	1	1
Time management: Attending on time, being ready to start the demo, good time management in discussion and demo.	1	1	1	1	1
Total/4	4	4	4	4	4

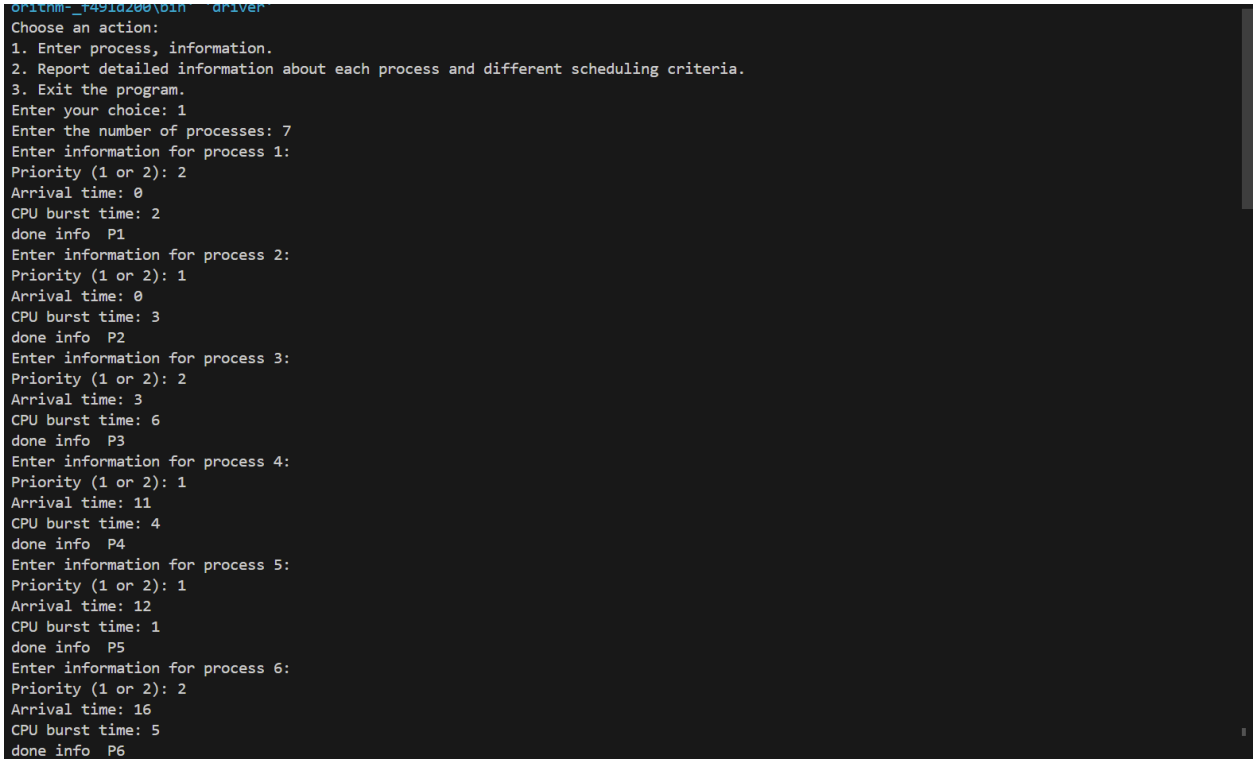
III. Screen shots.

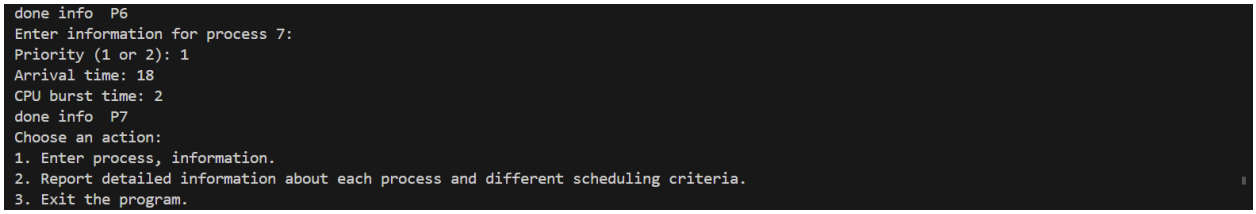
Screen showing sample input/output so that:

i. The RR condition is demonstrated with different scenarios (i.e., some processes have less/equal/more CPU burst time than the specified time quantum (3ms))

ii. The non-preemptive Shortest-Job-First (SJF) scheduling is demonstrated.

iii. iii. Preemption is demonstrated (a newly arriving process has a higher priority than the currently executing process) In addition,





```
1. Enter process, information.
2. Report detailed information about each process and different scheduling criteria.
3. Exit the program.
Enter your choice: 2
Scheduling order of the processes:


[P2|P1|P3|P4|P5|P4|P6|P7|P6]
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Detailed information about each process:
Process ID: P1
Priority: 2
Arrival time: 0
CPU burst: 2
Start time: 3
Termination time: 5
Turnaround time: 5
Waiting time: 3
Response time: 3
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Process ID: P2
Priority: 1
Arrival time: 0
CPU burst: 3
Start time: 0
Termination time: 3
Turnaround time: 3
Waiting time: 0
Response time: 0
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Process ID: P3
Priority: 2
Arrival time: 3
CPU burst: 6
Start time: 5
Termination time: 11
```

```
Process ID: P3
Priority: 2
Arrival time: 3
CPU burst: 6
Start time: 5
Termination time: 11
Turnaround time: 8
Waiting time: 2
Response time: 2
------------
Process ID: P4
Priority: 1
Arrival time: 11
CPU burst: 4
Start time: 11
Termination time: 16
Turnaround time: 5
Waiting time: 1
Response time: 0
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Process ID: P5
Priority: 1
Arrival time: 12
CPU burst: 1
Start time: 14
Termination time: 15
Turnaround time: 3
Waiting time: 2
Response time: 2
------------
Process ID: P6
Priority: 2
Arrival time: 16
CPU burst: 5
Start time: 16
Termination time: 23
Turnaround time: 7
```

```
------------
Process ID: P6
Priority: 2
Arrival time: 16
CPU burst: 5
Start time: 16
Termination time: 23
Turnaround time: 7
Waiting time: 2
Response time: 0
------------
Process ID: P7
Priority: 1
Arrival time: 18
CPU burst: 2
Start time: 18
Termination time: 20
Turnaround time: 2
Waiting time: 0
Response time: 0
------------
Average Turnaround Time: 4.714285714285714
Average Waiting Time: 1.4285714285714286
Average Response Time: 1.0

Report written to Report.txt
Choose an action:
1. Enter process, information.
2. Report detailed information about each process and different scheduling criteria.
3. Exit the program.
Enter your choice: 3
Exiting the program...
PS C:\Users\altwu\OneDrive\Desktop\scheduling-algorithm-> 
```