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CSCI 3453
Lab 2 Sample Output

Output sample using data from assignment specifications

FCFS
****
*******FCFS Stats for each process*******
****
 PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches
  1 | 0 | 10 | 20 | 10 | 0 | 0 | 10 | 0
  2 | 1 | 2 | 10 | 12 | 9 | 9 | 11 | 0
  3 | 2 | 9 | 1 | 21 | 10 | 10 | 19 | 0
  4 | 3 | 5 | 5 | 26 | 18 | 18 | 23 | 0
Average CPU burst time: 6.5 ms
Average response time: 9.25 ms
Average wait time: 9.25 ms
Average turnaround time: 15.75 ms
Total number of context switches: 0

SJF
****
********SJF Stats for each process********
****
 PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches
  1 | 0 | 10 | 20 | 10 | 0 | 0 | 10 | 0
  2 | 1 | 2 | 10 | 12 | 9 | 9 | 11 | 0
  3 | 2 | 9 | 1 | 26 | 15 | 15 | 24 | 0
  4 | 3 | 5 | 5 | 17 | 9 | 9 | 14 | 0
Average CPU burst time: 6.5 ms
Average response time: 8.25 ms
Average wait time: 8.25 ms
Average turnaround time: 14.75 ms
Total number of context switches: 0

PP
****
*******PP Stats for each process*******
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PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	20	27	0	17	27	1
2	1	2	10	18	0.5	15	17	1
3	2	9	1	11.5	0.5	0.5	9.5	0
4	3	5	5	16.5	8.5	8.5	13.5	0

Average CPU burst time: 6.5 ms
Average response time: 2.375 ms
Average wait time: 10.25 ms
Average turnaround time: 16.75 ms
Total number of context switches: 2

RR (q = 4)
****
*******RR Stats for each process*******
************** q = 4 *****************
****

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	20	27.5	0	17.5	27.5	2
2	1	2	10	6.5	3.5	3.5	5.5	0
3	2	9	1	28.5	4.5	17.5	26.5	2
4	3	5	5	25.5	8	17.5	22.5	1

Average CPU burst time: 6.5 ms
Average response time: 4 ms
Average wait time: 14 ms
Average turnaround time: 20.5 ms
Total number of context switches: 5

RR (q = 1)
****
*******RR Stats for each process*******
************** q = 1 *****************
****

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	20	36	0	26	36	9
2	1	2	10	7	0.5	4	6	1
3	2	9	1	37	2.5	26	35	8
4	3	5	5	26	4	18	23	4

Average CPU burst time: 6.5 ms
Average response time: 1.75 ms
Average wait time: 18.5 ms
Average turnaround time: 25 ms

Total number of context switches: 22

RR (q = 5)
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*************************************
*******RR Stats for each process*******
************** q = 5 *****************
*************************************
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PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	20	23	0	13	23	1
2	1	2	10	7.5	4.5	4.5	6.5	0
3	2	9	1	27	5.5	16	25	1
4	3	5	5	18	10	10	15	0

Average CPU burst time: 6.5 ms
Average response time: 5 ms
Average wait time: 10.875 ms
Average turnaround time: 17.375 ms
Total number of context switches: 2

Output sample using given input10 file

FCFS
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*******FCFS Stats for each process*******
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PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	10	0	0	10	0
2	1	3	0	13	9	9	12	0
3	2	8	51	21	11	11	19	0
4	4	4	84	25	17	17	21	0
5	5	5	44	30	20	20	25	0
6	6	7	28	37	24	24	31	0
7	9	2	97	39	28	28	30	0
8	10	6	70	45	29	29	35	0
9	13	1	15	46	32	32	33	0
10	15	9	7	55	31	31	40	0

Average CPU burst time: 5.5 ms
Average response time: 20.1 ms
Average wait time: 20.1 ms
Average turnaround time: 25.6 ms
Total number of context switches: 0

SJF

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********SJF Stats for each process********
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PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	10	0	0	10	0
2	1	3	0	15	11	11	14	0
3	2	8	51	46	36	36	44	0
4	4	4	84	20	12	12	16	0
5	5	5	44	25	15	15	20	0
6	6	7	28	38	25	25	32	0
7	9	2	97	12	1	1	3	0
8	10	6	70	31	15	15	21	0
9	13	1	15	16	2	2	3	0
10	15	9	7	55	31	31	40	0

Average CPU burst time: 5.5 ms

Average response time: 14.8 ms

Average wait time: 14.8 ms

Average turnaround time: 20.3 ms

Total number of context switches: 0

PP

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**************************************
*******PP Stats for each process*******
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PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	31.5	0	21.5	31.5	2
2	1	3	0	4.5	0.5	0.5	3.5	0
3	2	8	51	44.5	34.5	34.5	42.5	0
4	4	4	84	54.5	46.5	46.5	50.5	0
5	5	5	44	36.5	26.5	26.5	31.5	0
6	6	7	28	15	0.5	2	9	1
7	9	2	97	56.5	45.5	45.5	47.5	0
8	10	6	70	50.5	34.5	34.5	40.5	0
9	13	1	15	14.5	0.5	0.5	1.5	0
10	15	9	7	24	0	0	9	0

Average CPU burst time: 5.5 ms

Average response time: 18.9 ms

Average wait time: 21.2 ms

Average turnaround time: 26.7 ms

Total number of context switches: 3

RR (q = 1)

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************************************
*******RR Stats for each process*******
************** q = 1 *****************
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PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	73.5	0	63.5	73.5	9
2	1	3	0	16	0.5	12	15	2
3	2	8	51	70	2.5	60	68	7
4	4	4	84	41.5	3.5	33.5	37.5	3
5	5	5	44	54.5	5.5	44.5	49.5	4
6	6	7	28	71	7.5	58	65	6
7	9	2	97	31.5	8.5	20.5	22.5	1
8	10	6	70	67.5	9	51.5	57.5	5
9	13	1	15	24.5	10.5	10.5	11.5	0
10	15	9	7	76.5	12.5	52.5	61.5	6

Average CPU burst time: 5.5 ms
Average response time: 6 ms
Average wait time: 40.65 ms
Average turnaround time: 46.15 ms
Total number of context switches: 43

RR (q = 4)

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*******RR Stats for each process*******
************** q = 4 *****************
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PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	47.5	0	37.5	47.5	2
2	1	3	0	7.5	3.5	3.5	6.5	0
3	2	8	51	40	5.5	30	38	1
4	4	4	84	16	8	8	12	0
5	5	5	44	48.5	15.5	38.5	43.5	1
6	6	7	28	51.5	19	38.5	45.5	1
7	9	2	97	31.5	20.5	20.5	22.5	0
8	10	6	70	53.5	21.5	37.5	43.5	1
9	13	1	15	41	27	27	28	0
10	15	9	7	58.5	26	34.5	43.5	1

Average CPU burst time: 5.5 ms
Average response time: 14.65 ms
Average wait time: 27.55 ms
Average turnaround time: 33.05 ms

Total number of context switches: 7

RR (q = 7)
****
*******RR Stats for each process*******
************** q = 7 *****************
****
 PID | Arrival | CPU Burst | Priority | Finished | Response(ms) | Waiting(ms) | TurnAround(ms) | Context Switches

PID	Arrival	CPU Burst	Priority	Finished	Response(ms)	Waiting(ms)	TurnAround(ms)	Context Switches
1	0	10	37	37	0	27	37	1
2	1	3	0	10.5	6.5	6.5	9.5	0
3	2	8	51	54.5	8.5	44.5	52.5	1
4	4	4	84	22	14	14	18	0
5	5	5	44	27	17	17	22	0
6	6	7	28	34	21	21	28	0
7	9	2	97	39	28	28	30	0
8	10	6	70	45	29	29	35	0
9	13	1	15	46	32	32	33	0
10	15	9	7	56.5	31	32.5	41.5	1

Average CPU burst time: 5.5 ms
Average response time: 18.7 ms
Average wait time: 25.15 ms
Average turnaround time: 30.65 ms
Total number of context switches: 3