Below are the screenshots for outputs as well as performance of each algorithms in Test2 and Test2b.

- Test2b:
    o Scheduler_pri.java

cnv3103@csslab7h:~/CSS430$ cd ThreadOS

cnv3103@csslab7h:~/CSS430/ThreadOS$ cp Scheduler_pri.java Scheduler.java

cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.ajva

error: Class names, 'Scheduler.ajva', are only accepted if annotation processing is explicitly requested

1 error

cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.java

cnv3103@csslab7h:~/CSS430/ThreadOS$ java Boot

threadOS ver 2.0:

Type ? for help

threadOS: a new thread (thread=Thread[Thread-3,2,main] tid=0 pid=-1)

-->l Test2b

l Test2b

threadOS: a new thread (thread=Thread[Thread-5,2,main] tid=1 pid=0)

threadOS: a new thread (thread=Thread[Thread-7,2,main] tid=2 pid=1)

threadOS: a new thread (thread=Thread[Thread-9,2,main] tid=3 pid=1)

threadOS: a new thread (thread=Thread[Thread-11,2,main] tid=4 pid=1)

threadOS: a new thread (thread=Thread[Thread-13,2,main] tid=5 pid=1)
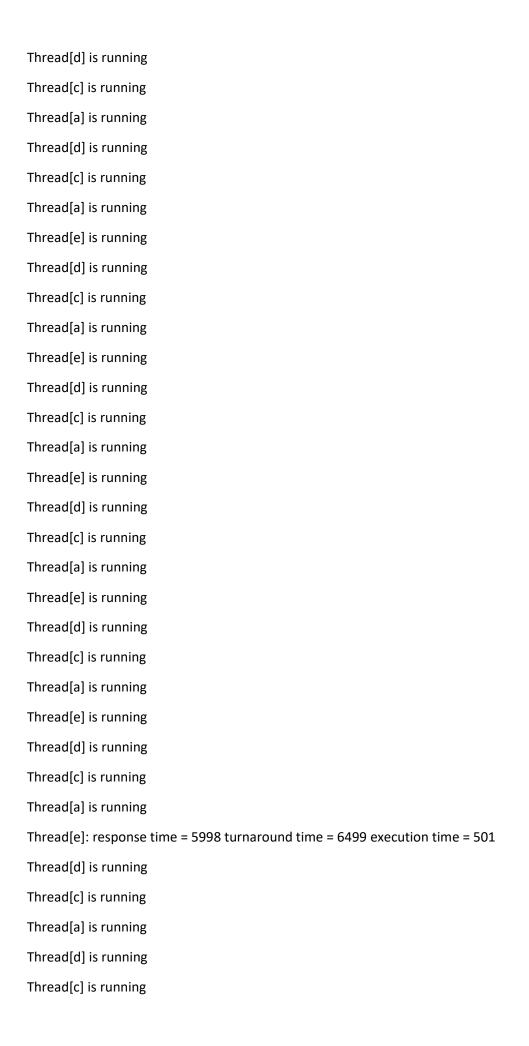
threadOS: a new thread (thread=Thread[Thread-15,2,main] tid=6 pid=1)

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[b] is running

Thread[a] is running

Thread[c] is running

Thread[b]: response time = 2997 turnaround time = 4000 execution time = 1003

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

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Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[e]: response time = 5998 turnaround time = 6499 execution time = 501

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c] is running

Thread[a] is running

Thread[d] is running

Thread[c]: response time = 3998 turnaround time = 7006 execution time = 3008

Thread[a]: response time = 1996 turnaround time = 7011 execution time = 5015

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

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Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d]: response time = 4997 turnaround time = 11015 execution time = 6018

Test2b finished; total time = 11021

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o   Scheduler_rr.java

cnv3103@csslab7h:~/CSS430/ThreadOS$ cp Scheduler_rr.java Scheduler.java

cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.ajva

error: Class names, 'Scheduler.ajva', are only accepted if annotation processing is explicitly requested
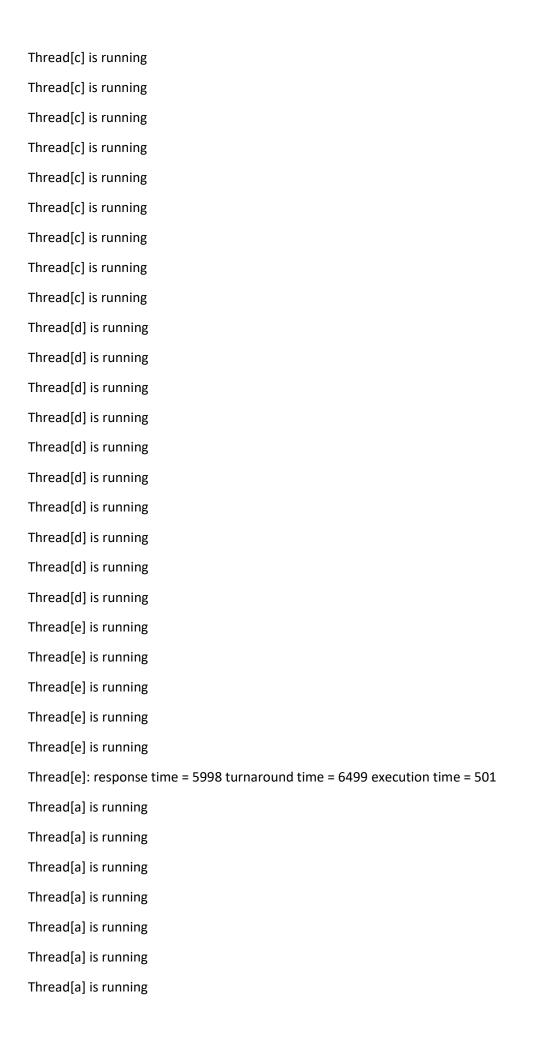
1 error

cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.java

Note: Scheduler.java uses or overrides a deprecated API.

Note: Recompile with -Xlint:deprecation for details.

cnv3103@csslab7h:~/CSS430/ThreadOS$ java Boot

threadOS ver 2.0:

Type ? for help

threadOS: a new thread (thread=Thread[Thread-3,5,main] tid=0 pid=-1)

-->l Test2b

l Test2b

threadOS: a new thread (thread=Thread[Thread-5,5,main] tid=1 pid=0)

threadOS: a new thread (thread=Thread[Thread-7,5,main] tid=2 pid=1)

threadOS: a new thread (thread=Thread[Thread-9,5,main] tid=3 pid=1)

threadOS: a new thread (thread=Thread[Thread-11,5,main] tid=4 pid=1)

threadOS: a new thread (thread=Thread[Thread-13,5,main] tid=5 pid=1)

threadOS: a new thread (thread=Thread[Thread-15,5,main] tid=6 pid=1)

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[e]: response time = 5998 turnaround time = 6499 execution time = 501

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

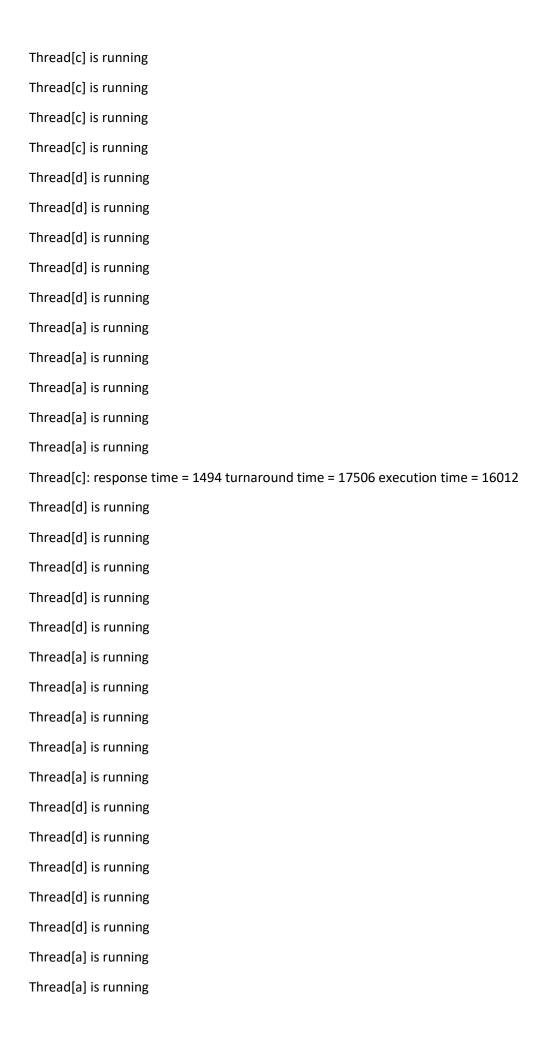Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b]: response time = 2996 turnaround time = 9502 execution time = 6506

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

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Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

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Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[c]: response time = 3998 turnaround time = 19506 execution time = 15508

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

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Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a]: response time = 1996 turnaround time = 26509 execution time = 24513

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d]: response time = 4998 turnaround time = 29510 execution time = 24512

Test2b finished; total time = 29516

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       o   Scheduler_mfq.java:

cnv3103@csslab7h:~/CSS430/ThreadOS$ cp Scheduler_mfq.java Scheduler.java

cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.java

Note: Scheduler.java uses or overrides a deprecated API.

Note: Recompile with -Xlint:deprecation for details.

cnv3103@csslab7h:~/CSS430/ThreadOS$ java Boot

threadOS ver 2.0:

Type ? for help

threadOS: a new thread (thread=Thread[Thread-3,5,main] tid=0 pid=-1)

-->l Test2b

l Test2b

threadOS: a new thread (thread=Thread[Thread-5,5,main] tid=1 pid=0)

threadOS: a new thread (thread=Thread[Thread-7,5,main] tid=2 pid=1)

threadOS: a new thread (thread=Thread[Thread-9,5,main] tid=3 pid=1)

threadOS: a new thread (thread=Thread[Thread-11,5,main] tid=4 pid=1)

threadOS: a new thread (thread=Thread[Thread-13,5,main] tid=5 pid=1)

threadOS: a new thread (thread=Thread[Thread-15,5,main] tid=6 pid=1)

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[e] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[b] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[e]: response time = 2495 turnaround time = 5997 execution time = 3502

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[b]: response time = 994 turnaround time = 7500 execution time = 6506

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

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Thread[d] is running

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Thread[a] is running

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Thread[a] is running

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Thread[c] is running

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Thread[d] is running

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Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[c] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[c]: response time = 1494 turnaround time = 17506 execution time = 16012

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[d] is running

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Thread[d] is running

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Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[a] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[a]: response time = 493 turnaround time = 25011 execution time = 24518

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d] is running

Thread[d]: response time = 1994 turnaround time = 28012 execution time = 26018

Test2b finished; total time = 28520

- Test2: performance comparison between rr and mfq.

```
q
cnv3103@csslab7h:~/CSS430/ThreadOS$ cp Scheduler_rr.java Scheduler.java
cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.java
Note: Scheduler.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
cnv3103@csslab7h:~/CSS430/ThreadOS$ java Boot
threadOS ver 2.0:
Type ? for help
threadOS: a new thread (thread=Thread[Thread-3,5,main] tid=0 pid=-1)
-->l Test2
l Test2
threadOS: a new thread (thread=Thread[Thread-5,5,main] tid=1 pid=0)
threadOS: a new thread (thread=Thread[Thread-7,5,main] tid=2 pid=1)
threadOS: a new thread (thread=Thread[Thread-9,5,main] tid=3 pid=1)
threadOS: a new thread (thread=Thread[Thread-11,5,main] tid=4 pid=1)
threadOS: a new thread (thread=Thread[Thread-13,5,main] tid=5 pid=1)
threadOS: a new thread (thread=Thread[Thread-15,5,main] tid=6 pid=1)
Thread[e]: response time = 5998 turnaround time = 6499 execution time = 501
Thread[b]: response time = 2996 turnaround time = 9505 execution time = 6509
Thread[c]: response time = 3998 turnaround time = 19508 execution time = 15510
Thread[a]: response time = 1995 turnaround time = 26510 execution time = 24515
Thread[d]: response time = 4998 turnaround time = 29511 execution time = 24513
Test2b finished; total time = 29517
-->q
q
cnv3103@csslab7h:~/CSS430/ThreadOS$ cp Scheduler_mfq.java Scheduler.java
cnv3103@csslab7h:~/CSS430/ThreadOS$ javac Scheduler.java
Note: Scheduler.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
cnv3103@csslab7h:~/CSS430/ThreadOS$ java Boot
threadOS ver 2.0:
Type ? for help
threadOS: a new thread (thread=Thread[Thread-3,5,main] tid=0 pid=-1)
-->l Test2
l Test2
threadOS: a new thread (thread=Thread[Thread-5,5,main] tid=1 pid=0)
threadOS: a new thread (thread=Thread[Thread-7,5,main] tid=2 pid=1)
threadOS: a new thread (thread=Thread[Thread-9,5,main] tid=3 pid=1)
threadOS: a new thread (thread=Thread[Thread-11,5,main] tid=4 pid=1)
threadOS: a new thread (thread=Thread[Thread-13,5,main] tid=5 pid=1)
threadOS: a new thread (thread=Thread[Thread-15,5,main] tid=6 pid=1)
Thread[e]: response time = 2498 turnaround time = 5999 execution time = 3501
Thread[b]: response time = 997 turnaround time = 7503 execution time = 6506
Thread[c]: response time = 1497 turnaround time = 17508 execution time = 16011
Thread[a]: response time = 496 turnaround time = 25013 execution time = 24517
Thread[d]: response time = 1998 turnaround time = 28014 execution time = 26016
```

- Performance comparison for Test2 and Test2b

Test2b	Scheduler_pri.java	Response	TAT	execution	Total			Test2	Scheduler_pri.java	Response	TAT	execution	Total
	Thread[b]	2996	3999	1003					Thread[b]	2996	3998	1002	
	Thread[e]	5998	6500	502					Thread[e]	5998	6499	501	
	Thread[c]	3998	7007	3009					Thread[c]	3998	7003	3005	
	Thread[a]	1996	7012	5016					Thread[a]	1996	7004	5008	
	Thread[d]	4998	11015	6017					Thread[d]	4997	11009	6012	
	Average	3997.2	7106.6	3109.4	14213.2				Average	3997	7102.6	3105.6	14205.2
	Scheduler_rr.java	Response	TAT	execution	Total				Scheduler_rr.java	Response	TAT	execution	Total
	Thread[b]	2996	9502	6506					Thread[b]	2996	9505	6509	
	Thread[e]	5998	6499	501					Thread[e]	5998	6499	501	
	Thread[c]	3998	19505	15507					Thread[c]	3998	19508	15510	
	Thread[a]	1996	26508	24512					Thread[a]	1995	26510	24515	
	Thread[d]	4998	29508	24510					Thread[d]	4998	29511	24513	
	Average	3997.2	18304.4	14307.2	36608.8				Average	3997	18306.6	14309.6	36613.2
	Scheduler_mfq.java	Response	TAT	execution	Total				Scheduler_mfq.java	Response	TAT	execution	Total
	Thread[b]	996	7501	6505					Thread[b]	997	7503	6506	
	Thread[e]	2497	5999	3502					Thread[e]	2498	5999	3501	
	Thread[c]	1496	17507	16011					Thread[c]	1497	17508	16011	
	Thread[a]	494	25011	24517					Thread[a]	496	25013	24517	
	Thread[d]	1997	28013	26016					Thread[d]	1998	28014	26016	
	Average	1496	16806.2	15310.2	33612.4				Average	1497.2	16807.4	15310.2	33614.8

⇨ Mfq performs a little bit better in terms of average response time and average TAT