

PROJECT 2 OUTPUT SUMMARY

First Come First Serve

***** Time Chart for 100 Quanta *****

```
..P67
.....P23
.....P32
.....P36
.....P68
.....P15
.....P47
.....P39
.....P3
.....P24
.....P25
.....P8
.....P63
.....P53
.....P57
.....P50
.....P31
```

***** Algorithm Statistic *****

Average ResponseTime: 44
Average TurnaroundTime: 50.2941
Average WaitTime: 44
Throughput: 0.17

***** Algorithm Statistic *****

Average ResponseTime: 36.6842
Average TurnaroundTime: 41.8421
Average WaitTime: 36.6842
Throughput: 0.19

***** Algorithm Statistic *****

Average ResponseTime: 11.9375
Average TurnaroundTime: 18.1875
Average WaitTime: 11.9375
Throughput: 0.16

***** Algorithm Statistic *****

Average ResponseTime: 19.4286
Average TurnaroundTime: 24.1429
Average WaitTime: 19.4286
Throughput: 0.21

***** Algorithm Statistic *****

Average ResponseTime: 26.087
Average TurnaroundTime: 30.8696
Average WaitTime: 26.087

Throughput: 0.23

***** Overall Average Algorithm Statistic *****

Overall Average ResponseTime: 27.6274

Overall Average TurnaroundTime: 33.0672

Overall Average WaitTime: 27.6274

Overall Throughput: 0.192

Round Robin Sample Output:

*** RR Scheduler Process List ***

Name: P49

Arrival: 0

Service: 5

Priority: 4

Name: P40

Arrival: 2

Service: 6

Priority: 3

Name: P43

Arrival: 2

Service: 1

Priority: 3

Time Chart from 0 to 99 quanta:

P49

.P49

..P49

...P40

....P43

.....P49

.....P7

.....P40

.....P10

.....P1

***** Algorithm Statistic *****

Average ResponseTime: 14.48

Average TurnaroundTime: 6.48

Average WaitTime: 6.4

Throughput: 1

***** ROUND ROBIN OVERALL STATS *****

***** Overall Average Algorithm Statistic *****

Overall Average ResponseTime: 9.3647

Overall Average TurnaroundTime: 20.9613

Overall Average WaitTime: 19.8593

Overall Throughput: 0.314

Shortest Job First

```
***** RUN 1 *****
```

```
Starting # of Jobs: 31
```

```
***** start SJF *****
```

```
***** Algorithm Statistic *****
```

```
Average ResponseTime: 2.76471
```

```
Average TurnaroundTime: 8.52941
```

```
Average WaitTime: 2.76471
```

```
Throughput: 0.17
```

```
***** Time Chart for 100 Quanta *****
```

```
.P27
.....P13
.....P29
.....P28
.....P14
.....P20
.....P21
.....P26
.....P17
.....P5
.....P1
.....P15
.....P8
.....P7
.....P19
.....P4
.....P22
```

```
***** RUN 2 *****
```

```
Starting # of Jobs: 19
```

```
***** start SJF *****
```

```
***** Algorithm Statistic *****
```

```
Average ResponseTime: 2.33333
```

```
Average TurnaroundTime: 7.33333
```

```
Average WaitTime: 2.33333
```

```
Throughput: 0.12
```

```
***** Time Chart for 100 Quanta *****
```

```
..P3
.....P14
.....P12
.....P11
.....P17
.....P8
.....P13
.....P10
.....P7
.....P15
.....P19
.....P9
```

***** RUN 3 *****

Starting # of Jobs: 97

***** start SJF *****

***** Algorithm Statistic *****

Average ResponseTime: 5.2
Average TurnaroundTime: 8.5
Average WaitTime: 5.2
Throughput: 0.3

***** Time Chart for 100 Quanta *****

```
..P83
.....P90
.....P96
.....P19
.....P1
.....P80
.....P84
.....P35
.....P22
.....P49
.....P24
.....P44
.....P95
.....P28
.....P52
.....P58
.....P88
.....P71
.....P14
.....P74
.....P81
.....P57
.....P68
.....P42
.....P92
.....P7
.....P48
.....P32
.....P47
.....P87
```

***** RUN 4 *****

Starting # of Jobs: 70

***** start SJF *****

***** Algorithm Statistic *****

Average ResponseTime: 5.08333
Average TurnaroundTime: 9.375
Average WaitTime: 5.08333
Throughput: 0.24

***** Time Chart for 100 Quanta *****

```
P46
.....P59
.....P68
.....P13
.....P6
.....P64
.....P33
.....P62
.....P16
.....P29
.....P41
.....P47
.....P57
.....P26
.....P40
.....P43
.....P9
.....P42
.....P10
.....P25
.....P18
.....P54
.....P45
.....P24
```

***** RUN 5 *****

Starting # of Jobs: 31

***** start SJF *****

***** Algorithm Statistic *****

Average ResponseTime: 1.94444
Average TurnaroundTime: 6.83333
Average WaitTime: 1.94444
Throughput: 0.18

***** Time Chart for 100 Quanta *****

..P20
.....P8
.....P15
.....P28
.....P16
.....P9
.....P3
.....P17
.....P2
.....P29
.....P23
.....P14
.....P11
.....P10
.....P6
.....P26
.....P22
.....P12

***** SJF OVERALL STATS *****

***** Overall Average Algorithm Statistic *****

Overall Average ResponseTime: 3.46516
Overall Average TurnaroundTime: 8.11422
Overall Average WaitTime: 3.46516
Overall Throughput: 0.202

Shortest Remaining Time First

*****SRT*****

*** SRT Scheduler Process List ***

Name: P16

Arrival: 2

Service: 5

Priority: 3

Name: P14

Arrival: 3

Service: 1

Priority: 4

Name: P30

Arrival: 4

Service: 4

Priority: 2

Name: P1

Arrival: 10

Service: 2
Priority: 1

Name: P15
Arrival: 14
Service: 5
Priority: 1

Time Chart from 0 to 99 quanta:

idle
..idle
...P16
....P14
.....P16
.....P16
.....P16
.....P16
.....P30
.....P30
.....P30
.....P30

***** Algorithm Statistic *****
Average ResponseTime: 4.92593
Average TurnaroundTime: 8.96296
Average WaitTime: 5
Throughput: 0.27

***** SRT OVERALL STATS *****
***** Overall Average Algorithm Statistic *****
Overall Average ResponseTime: 5.60672
Overall Average TurnaroundTime: 9.9463
Overall Average WaitTime: 5.90171
Overall Throughput: 0.266

Highest Priority First - non Preemptive:

***** HPFNP *****
***** Jobs *****
Name: P2
Arrival: 1
Service: 9
Priority: 1

Name: P7
Arrival: 1
Service: 7
Priority: 2

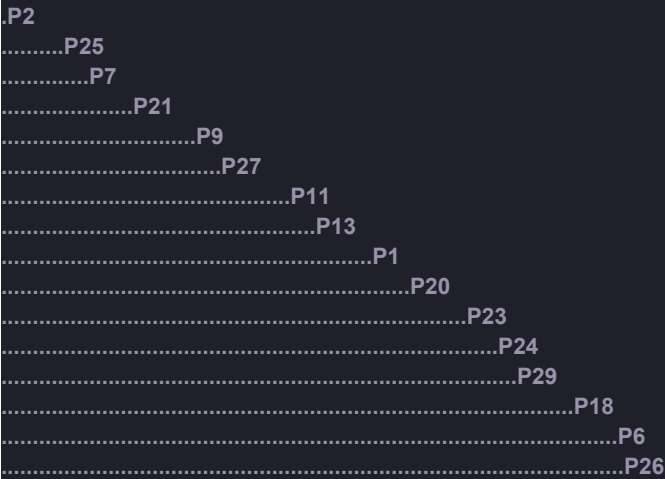
Name: P21
Arrival: 1
Service: 10
Priority: 2

Name: P9
Arrival: 5
Service: 4
Priority: 2

Name: P25
Arrival: 9
Service: 4

Priority: 1

***** Time Chart for 100 Quanta *****



***** Algorithm Statistic *****

Q1:
Avg Turn: 7.71429
Avg Wait: 2.28571
Avg Resp: 2.28571
Throughput:0.07
Q2:
Avg Turn: 48.1111
Avg Wait: 40.6667
Avg Resp: 40.6667
Throughput:0.09
Q3:
Avg Turn: 0
Avg Wait: 0
Avg Resp: 0
Throughput:0
Q4:
Avg Turn: 0
Avg Wait: 0
Avg Resp: 0
Throughput:0
Total:
Avg Turn: 30.4375
Avg Wait: 23.875
Avg Resp: 23.875
Throughput:0.16
Jobs list's size: 31

***** Total HPFNP *****

***** Overall Average Algorithm Statistic *****

Overall Average ResponseTime: 11.4211
Overall Average TurnaroundTime: 16.9474
Overall Average WaitTime: 11.4211
Overall Throughput: 0.19

Highest Priority First - Preemptive:

*** HPF-preemptive Scheduler Process List ***

Name: P30

Arrival: 1

Service: 1

Priority: 1

Name: P79

Arrival: 2

Service: 2

Priority: 2

Name: P36

Arrival: 3

Service: 3

Priority: 1

Time Chart from 0 to 99 quanta:

<idle>

.P30-p1

..P79-p2

...P36-p1

....P36-p1

.....P36-p1

.....P46-p1

.....P45-p1

.....P46-p1

.....P45-p1

.....P46-p1

.....P45-p1

.....P45-p1

.....P79-p2

.....P96-p2

.....P83-p1

****The tail “-p1” indicates that this Process has priority 1.**

***** STATISTICS FOR QUEUE 1 *****

***** Algorithm Statistic *****

Average ResponseTime: 4.975

Average TurnaroundTime: 0.875

Average WaitTime: 0.725

Throughput: 0.4

***** STATISTICS FOR QUEUE 2 *****

***** Algorithm Statistic *****

Average ResponseTime: 6.56757

Average TurnaroundTime: 1.62162

Average WaitTime: 1.51351

Throughput: 0.37

***** STATISTICS FOR QUEUE 3 *****

***** Algorithm Statistic *****

Average ResponseTime: 20.2273

Average TurnaroundTime: 4.59091

Average WaitTime: 4.5

Throughput: 0.22

***** STATISTICS FOR QUEUE 4 *****

***** Algorithm Statistic *****

Average ResponseTime: 0

Average TurnaroundTime: 0

Average WaitTime: 0

Throughput: 0.01

***** HPF-PREEMPTIVE OVERALL STATS *****

***** Overall Average Algorithm Statistic *****

Overall Average ResponseTime: 17.0262

Overall Average TurnaroundTime: 3.27623

Overall Average WaitTime: 3.14275

Overall Throughput: 0.156