SCHEDULING ALGORITHMS ( PART 2) – EXERCISE 1 ( LECTURE NOTES)

Consider a set of processes, which arrive at a system as follows:-

|  |  |  |
| --- | --- | --- |
| Process Name | Arrival Time | Burst/ Service time  (amount of time it needs to complete its processing) |
| P1 | 0 | 4 |
| P2 | 2 | 1 |
| P3 | 3 | 6 |
| P4 | 8 | 2 |
| P5 | 9 | 5 |
| P6 | 12 | 2 |

1. SRT – Shortest Remaining Time

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time -> 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| P1 A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P2 |  | A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Average Turnaround time:

Average Response time:

1. Round Robin Q=3

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Time -> 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| P1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| P6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Average Turnaround time:

Average Response time: