**An Improved Scheduling Algorithm for Real Time Systems**

**Result Analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Process No.** | **1** | **2** | **3** | **4** | **5** |
| **Burst Time** | 80 | 60 | 65 | 120 | 30 |
| **Priority** | 1 | 3 | 2 | 4 | 5 |
| **Output obtained by Proposed Algorithm** | | | | | |
| **ITS** | 86 | 67 | 71 | 126 | 37 |
| **Round 1** | 80 | 60 | 35 | 62 | 30 |
| **Round 2** | 0 | 0 | 30 | 58 | 0 |
| **Waiting Time** | 0 | 80 | 232 | 235 | 175 |
| **Turnaround Time** | 80 | 140 | 297 | 355 | 205 |
| **Output obtained by Round Robin Scheduling Algorithm** | | | | | |
| **Waiting Time** | 231 | 202 | 222 | 235 | 128 |
| **Turnaround Time** | 311 | 262 | 287 | 355 | 158 |
| **Output obtained by Priority Scheduling Algorithm** | | | | | |
| **Waiting Time** | 0 | 80 | 145 | 205 | 325 |
| **Turnaround Time** | 80 | 145 | 205 | 325 | 355 |

**Comparison**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Process No.** | | **1** | **2** | **3** | **4** | **5** | **Average** |
| **Proposed Algorithm** | **Waiting Time** | 0 | 80 | 232 | 235 | 175 | 144.40 |
| **Turnaround Time** | 80 | 140 | 297 | 355 | 205 | 215.40 |
| **Round Robin** | **Waiting Time** | 231 | 202 | 222 | 235 | 128 | 203.60 |
| **Turnaround Time** | 311 | 262 | 287 | 355 | 158 | 274.60 |
| **Priority Scheduling** | **Waiting Time** | 0 | 80 | 145 | 205 | 325 | 151.00 |
| **Turnaround Time** | 80 | 145 | 205 | 325 | 355 | 222.00 |

Thus, we observe that the proposed algorithm has less Average waiting time and Average turnaround time as compared to Round Robin and Priority Scheduling Algorithms.