

Assignment3

Scheduler

Screenshots of outputs of given respective tasks

Task1:

```
Enter the number of processes: 3
Enter burst time for process 1: Process created with PID: 6146
4
Enter priority for process 1: 2
Enter burst time for process 2: Process created with PID: 6147
2
Enter priority for process 2: 1
Enter burst time for process 3: Process created with PID: 6148
7
Enter priority for process 3: 3
```

Task2:

```
Scheduling algorithm:
1. Round-Robin
2. Priority-based
1
Enter time quantum for RR Scheduling: 3
Round-Robin selected. Quantum time set to 3.
```

Task 3,4,5 and 6:

```
Process 6146 executed for 3 units.  
Remaining burst times: 1 2 7  
Process 6147 executed for 2 units.  
Remaining burst times: 1 0 7  
Process 6148 executed for 3 units.  
Remaining burst times: 1 0 4  
Process 6146 executed for 1 units.  
Remaining burst times: 0 0 4  
Process 6148 executed for 3 units.  
Remaining burst times: 0 0 1  
Process 6148 executed for 1 units.  
Remaining burst times: 0 0 0
```

Average Waiting Time: 3.33333

```
Process 6147 executed (priority 1).  
Process 6146 executed (priority 2).  
Process 6148 executed (priority 3).
```

Average Waiting Time: 2.66667

Round-Robin Average Waiting Time: 3.33333

Priority-based Average Waiting Time: 2.66667

Priority-based scheduling performed better with lower average waiting time.