



Faculty of Engineering & Technology
Department of Electrical & Computer Engineering
ENCS3390: Operating System Concepts
First Semester, 2023/2024

Assignment 2

Published: Nov 27, 2023. Due: Dec 7, 2023 by midnight.

Consider the following set of processes:

| Process | Arrival Time | Burst Time | Priority |
|----------------|---------------------|-------------------|-----------------|
| P1 | 0 | 10 | 3 |
| P2 | 1 | 8 | 2 |
| P3 | 3 | 14 | 3 |
| P4 | 4 | 7 | 1 |
| P5 | 6 | 5 | 0 |
| P6 | 7 | 4 | 1 |
| P7 | 8 | 6 | 2 |

For each of the following scheduling algorithms, show the Gantt chart, average waiting time, and average turnaround time.

- 1- First Come First Served.**
- 2- Shortest Job First.**
- 3- Shortest Remaining Time First.**
- 4- Round Robin, with $q = 5$**
- 5- Priority Scheduling, with aging; where priority is decremented by 1 if the process remains in the ready queue for 5 time units.**