CSCI 315 Operating Systems Design
Activity 10

Source: Operating Systems Concepts}, Silberschatz, Galvin, and Gagne, 9th edition.
Consider the following set of processes, with the length of the CPU burst given in milliseconds:

Process	Burst Time	Priority
P_1	10	3
P_2	1	1
P_3	2	3
P_4	1	4
P_5	5	2

The processes are assumed to have arrived in the order {P_1, P_2, P_3, P_4, P_5} all at time 0.
Consider the following scheduling algorithms: first-come, first-serve (FCFS), shortest-job first (SJF), nonpreemptive priority (a smaller number implies a higher priority), round-robin (RR) with *quantum*=1, and RR with *quantum*=2.

For each of the algorithms above:

- Draw a Gantt chart to illustrate the execution of these processes
- Calculate individual process turnaround times and the average turnaround time
- Calculate individual waiting times and average waiting time