

Assignment 3 – Written Answers

1. Below is a recreation of the process table from the Assignment.

Process	Arrival Time	Duration	Priority
P1	1	5	3
P2	3	6	1
P3	5	5	4
P4	5	7	3
P5	7	6	2

Following now is the scheduling of these processes under two different scheduling schemes. Blue cells indicate running, and bold numbers indicate the end of a time slice.

Priority Scheduling, Time Slice = 2:

	Time Slice (Blue indicates 'Running')																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
P1	■	■	■	■						■																			
P2																								■	■	■	■	■	■
P3					■	■	■	■	■																				
P4											■	■	■	■	■	■	■												
P5																		■	■	■	■	■	■						

Priority Scheduling, Time Slice = 3:

	Time Slice (Blue indicates 'Running')																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
P1	■	■	■	■						■																			
P2																								■	■	■	■	■	■
P3					■	■	■	■	■																				
P4											■	■	■	■	■	■	■												
P5																		■	■	■	■	■	■						

Round Robin Scheduling, Time Slice = 2:

	Time Slice (Blue indicates 'Running')																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
P1	Blue	Blue									Blue	Blue									Blue								
P2			Blue	Blue									Blue	Blue								Blue					Blue		
P3					Blue	Blue									Blue	Blue							Blue						
P4							Blue	Blue									Blue	Blue						Blue				Blue	Blue
P5									Blue	Blue										Blue	Blue					Blue	Blue		

Round Robin Scheduling, Time Slice = 3:

	Time Slice (Blue indicates 'Running')																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
P1	Blue	Blue	Blue													Blue	Blue												
P2				Blue	Blue	Blue												Blue							Blue	Blue			
P3							Blue	Blue	Blue										Blue	Blue									
P4										Blue	Blue	Blue									Blue						Blue	Blue	Blue
P5													Blue	Blue	Blue							Blue	Blue	Blue					