

King Saud University
Department of Computer Science
CSC227: Operating Systems
Tutorial No. 6

Exercise 1

Below is a table of four CPU-bound processes P1, P2, P3, and P4 and their associated arrival times and CPU burst times.

- a) Draw Gantt charts illustrating the execution of these processes using SRTF scheduling.
- b) What is the average turnaround time
- c) What is the average waiting time

Process	Arrival	Burst Time
P1	0	8
P2	1	4
P3	2	9
P4	3	5

Exercise 2

Below is a table of four CPU-bound processes P1, P2, P3, and P4 and their associated arrival times and CPU burst times.

Process	Arrival	Burst Time
P1	0	7
P2	2	4
P3	4	1
P4	5	4

- a) Draw Gantt charts illustrating the execution of these processes using SRTF scheduling.
- b) What is the average turnaround time
- c) What is the average waiting time

Exercise 3

Below is a table of five CPU-bound processes P1, P2, P3, P4, and P5 and their associated arrival times and CPU burst times.

Process	Arrival	Burst Time
P1	0	10
P2	0	29
P3	0	3
P4	0	7
P5	0	12

- Draw Gantt charts illustrating the execution of these processes using RR (quantum=10) scheduling.
- What is the average turnaround time
- What is the average waiting time