CPU-scheduling Exercises

Exercises 1

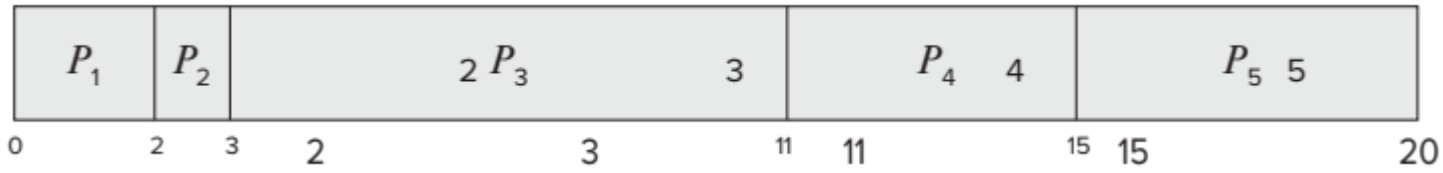
- n! = 1.2.3…..(n-1).n

Exercises 2

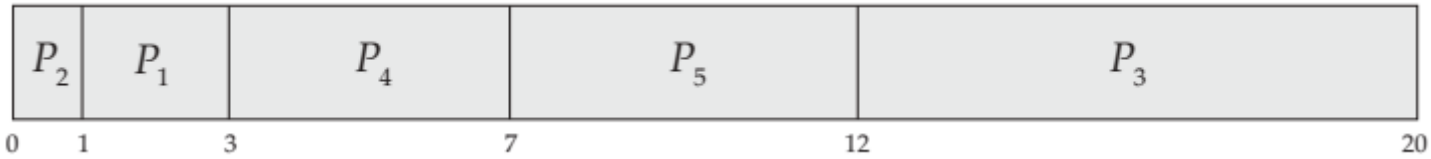
- Turnaround time = Finish Time - Arrival Time
- FCFS
  - TT1 = 8; TT2 = 12-0.4 = 11.6 ; TT3 = 13-1 = 12
  - TT (avg) = 10.53
- SJF
  - TT1 = 8; TT3 = 9-1 = 8 ; TT2 = 13-0.4 = 12.6
  - TT (avg) = 9.53
- SJF
  - TT3 = 2-1 = 1 ; TT2 = 6-0.4 = 5.6; TT1 = 14
  - TT (avg) = 6.87

Exercises 3

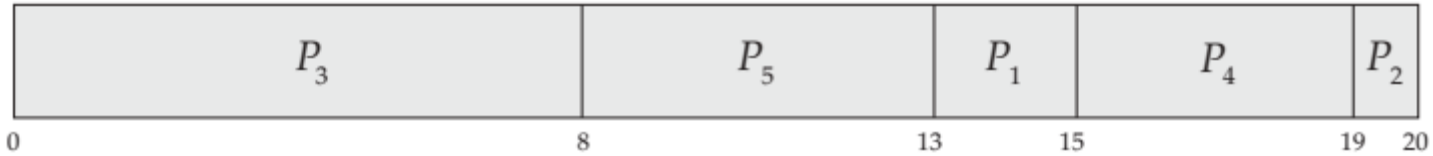
- FCFS



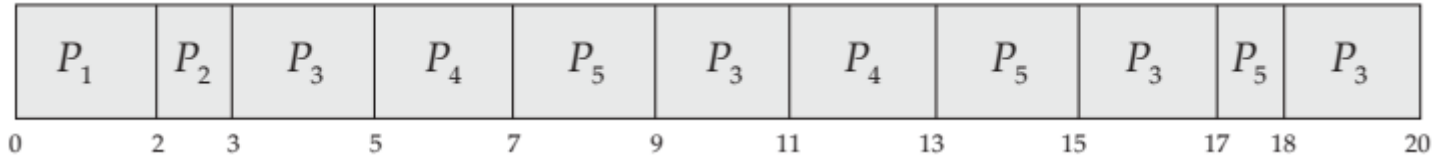
- SJF



- Nonpreemptive priority



- RR



Exercises 3

- Turnaround time

	FCFS	SJF	Priority	RR
P_1	2	3	15	2
P_2	3	1	20	3
P_3	11	20	8	20
P_4	15	7	19	13
P_5	20	12	13	18

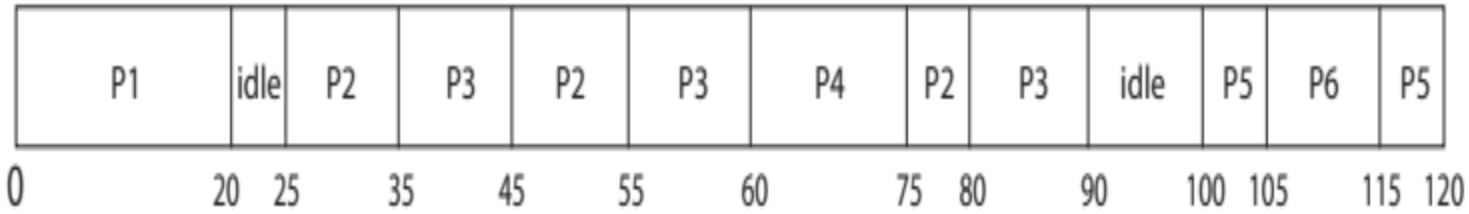
Exercises 3

- The waiting time = Turnaround - Burst

	FCFS	SJF	Priority	RR
P_1	0	1	13	0
P_2	2	0	19	2
P_3	3	12	0	12
P_4	11	3	15	9
P_5	15	7	8	13

Exercises 4

a. The Gantt chart:



b. P1: 20-0 - 20, P2: 80-25 = 55, P3: 90 - 30 = 60, P4: 75-60 = 15, P5: 120-100 = 20, P6: 115-105 = 10

c. P1: 0, p2: 40, P3: 35, P4: 0, P5: 10, P6: 0

d. 105/120 = 87.5 percent.