

SJF scheduling (shortest job first)

<u>Process</u>	<u>cpu burst time</u>
P ₁	4
P ₂	2
P ₃	1
P ₄	3

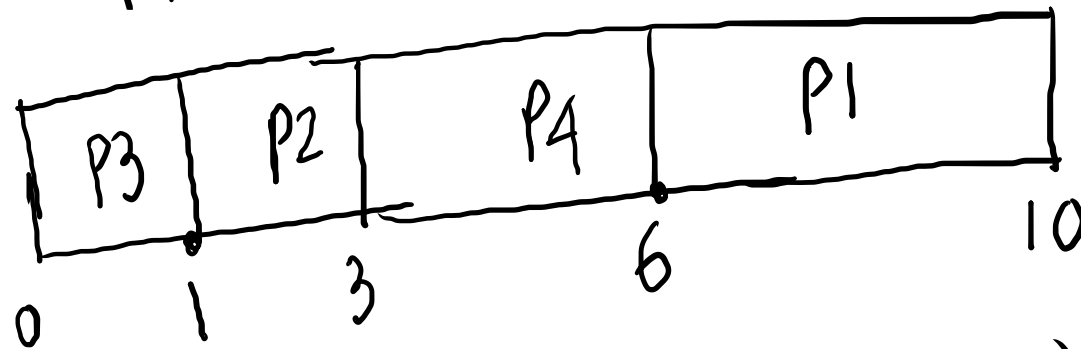
T. around time for P₁ = 10

P₂ = 3

P₃ = 1

P₄ = 6

Gantt chart



Avg. turn around time
 $= (10 + 3 + 1 + 6) / 4$
 $= 20 / 4 = 5$ unit

W. time for P₁ = 6
 " " " P₂ = 1
 " " " P₃ = 0
 " " " P₄ = 3

Avg. waiting time = $(6 + 0 + 1 + 3) / 4 = 10 / 4 = 2.5$ unit

Round Robin System:

time quantum = 1

Process.

P1

P2

P3

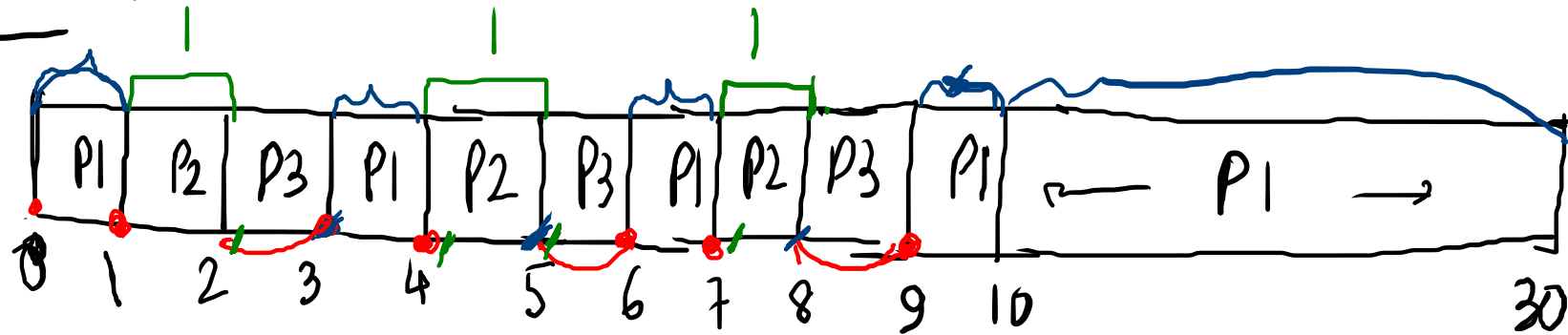
cpu burst time

24 - 3 = 21 remaining time =

3

3

Gantt chart:



w. time for P1 = $(3-1) + (6-4) + (9-7) = 6$

w. " " P2 = $1 + (4-2) + (7-5) = 5$

waiting " " P3 = $2 + (5-3) + (8-6) = 6$

Avg. waiting time = $(6+5+6)/3 = 17/3 = 5.66$ unit. (Ans)

SJF { preemptive }
 { nonpreemptive }