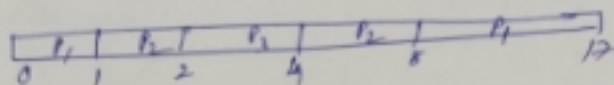


Preemptive (priority-based) also

process	Arrival time	priority	Arrival time
P ₁	10	3	0
P ₂	5	2	1
P ₃	2	1	2

Gantt chart

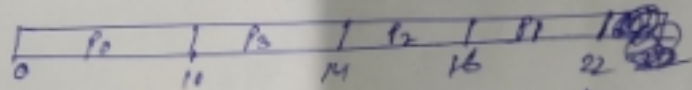


$$\text{Avg N/T} = \frac{0 + (8-1) + 1 + (6-2) + 2}{5} = \frac{7+1+2+2}{5} = \frac{12}{5} = 2.4$$

Nonpreemptive (priority-based) also

process	AT (ms)	Next arrival (ms)	priority
P ₀	0	10	5
P ₁	1	6	4
P ₂	3	2	2
P ₃	5	4	0

Gantt chart



for each process we compare the finish time and wait time from the gantt chart.

process	AT T ₀	Next arrival Δt	FT T _f	TAT = T _f - T ₀	N/T = TAT - Δt
P ₀	0	10	10	10	0
P ₁	1	6	22	21	15
P ₂	3	2	16	13	11
P ₃	5	4	14	09	05

$$\text{Avg TAT} = \frac{13}{4} = 3.25 \quad \text{Avg N/T} = \frac{31}{4} = 7.75$$