

FCFS Example with different arrival time

	AT	BT	ST	CT	TAT	WT	RT
* P1	3	2	3	5	2	0	0
x P2	0	1	0	1	1	0	0
* P3	3	3	5	8	5	2	2
+ P4	10	5	13	18	8	3	3
x P5	9	4	9	13	4	0	0

Assume, no I/O

Assume, no context switch overhead

$$\text{Avg TAT} = (2+1+5+8+4)/5 = \frac{20}{5} = 4\text{ms}$$

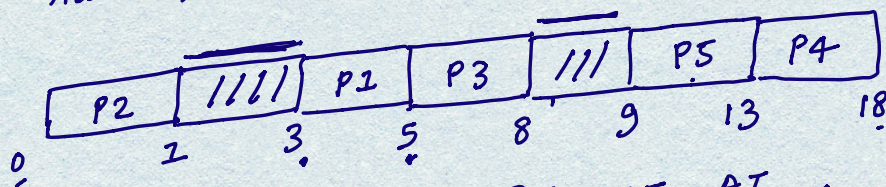
$$\text{Avg WT} = (0+0+2+3+0)/5 = \frac{5}{5} = 1\text{ms}$$

$$\text{Avg RT} = 1\text{ms}$$

$$\text{CPU utilization} = \frac{18-3}{18} = \frac{15}{18} \times 100 = \frac{5}{6} \times 100$$

AT
 → P1 1
 P2 4
 → P3 2

$$= \frac{500}{6} \%$$



$$\text{TAT} = \text{CT} - \text{AT} \quad \text{RT} = \text{ST} - \text{AT}$$

$$\text{WT} = \text{TAT} - \text{BT}$$

$$\text{Throughput} = \frac{5}{15} = \frac{1}{3} \text{ process/ms}$$