

FCFS with Context Switch Overhead

	AT	BT	ST	CT	TAT	WT	RT
P1	0	2	1	3	3	1	1
P2	1	1	4	5	4	3	3
P3	2	3	6	9	7	4	4
P4	3	4	10	14	11	7	7
P5	4	5	15	20	16	11	11

$$\text{Avg TAT} = (3+4+7+11+16)/5 = \frac{41}{5}$$

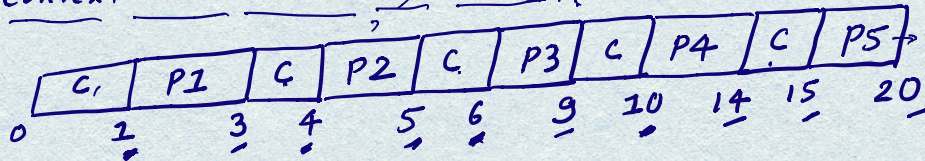
$$\text{Avg WT} = (1+3+4+7+11)/5 = \frac{28}{5}$$

$$\text{Avg RT} = \frac{28}{5}$$

$$\text{CPU utilization} = \frac{15}{28} \times \frac{5}{60} = 75\%$$

Assume, there is no I/O

Context switch overhead = 1ms



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