

②

P1	P2	P3	P4	P1	P2	P3	P4	P1	P3	P4	P1	P4	P1	
3	6	9	12	15	17	20	23	26	27	30	33	34	37	

$$T_{\text{TRND}}(P1) = 22 + 15 = 37$$

$$T_{\text{TRND}}(P2) = 12 + 5 = 17$$

$$\text{Avg } T_{\text{TRND}} = 28.75$$

$$T_{\text{TRND}}(P3) = 20 + 7 = 27$$

$$T_{\text{TRND}}(P4) = 24 + 10 = 34$$

$$T_w(P1) = 9 + 8 + 4 + 1 = 22$$

$$T_w(P2) = 3 + 9 = 12$$

$$T_w(P3) = 6 + 8 + 6 = 20$$

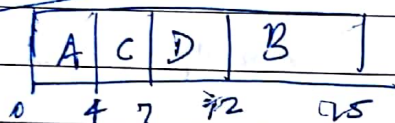
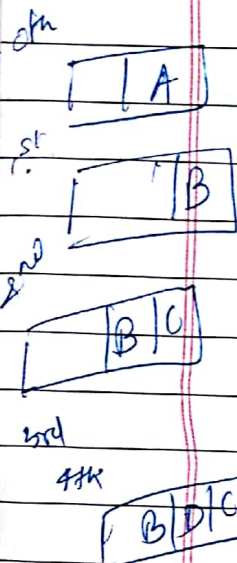
$$T_w(P4) = 9 + 8 + 4 + 8 = 29$$

$$\text{Avg } T_w = 19.5$$

Q3. For the following list of processes draw burst chart for priority scheduling both preemptive & non-preemptive.  
 A large priority number has higher priority.

Processes	Arrival	CPU burst	Priority
A	0.0000	4	3
B	1.0001	3	4
C	2.001	3	1
D	3.001	5	5

Non-preemptive



$$T_{TRND}(A) = 4$$

$$T_{TRND}(B) = 15 - 1 = 14$$

$$T_{TRND}(C) = 7 - 2 = 5$$

$$T_{TRND}(D) = 12 - 3 = 9$$

$$\text{Avg. } T_{TRND} = 8$$

$$T_W(A) = 0$$

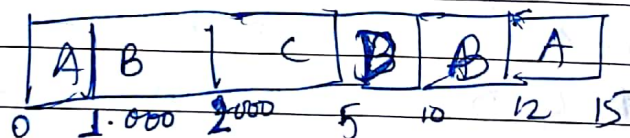
$$T_W(B) = 12 - 1$$

$$T_W(C) = 4 - 2 = 2$$

$$T_W(D) = 7 - 3 = 5$$

$$\text{Avg } T_W = 4.5$$

Preemptive



$$T_W(A) = (0-0) + (12-1) = 11$$

$$T_W(B) = 1 + (10-2) - 1 = 8$$

$$T_W(C) = 2 - 2 = 0$$

$$T_W(D) = 5 - 3 = 2$$

$$\text{Avg } T_W = 5.25$$

$$T_{TRND}(A) = 15$$

$$T_{TRND}(B) = 12 - 1 = 11$$

$$T_{TRND}(C) = 5 - 2 = 3$$

$$T_{TRND}(D) = 10 - 3 = 7$$

$$\text{Avg. } T_{TRND} = 9$$

