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Worksheet 1 First Come First Serve Algorithm

1. Problem

JID	AT (Arrival Time)	BT (Burst Time)
J1	0	4
J2	1	5
J3	3	5
J4	6	3
J5	8	6
J6	12	2

Required

a. Ready Queue

J1	J2	J3	J4	J5	J6
4	5	5	3	6	2

b. Gantt Chart

J1	4	J2	9	J3	14	J4	17	J5	23	J6	25
0											

c. Turnaround and waiting time

$$TT = FT - AT$$

$$J1 = 4 - 0 = 4$$

$$J2 = 9 - 1 = 8$$

$$J3 = 14 - 3 = 11$$

$$J4 = 17 - 6 = 11$$

$$J5 = 23 - 8 = 15$$

$$J6 = 25 - 12 = 13$$

$$WT = TT - BT$$

$$J1 = 4 - 4 = 0$$

$$J2 = 8 - 5 = 3$$

$$J3 = 11 - 5 = 6$$

$$J4 = 11 - 3 = 8$$

$$J5 = 15 - 6 = 9$$

$$J6 = 13 - 2 = 11$$

d. Average Turnaround and waiting time

$$ATT = 4 + 8 + 11 + 11 + 15 + 13 = 62/6 = \mathbf{10.33 \text{ ms}}$$

$$AWT = 0 + 3 + 6 + 8 + 9 + 11 = 37/6 = \mathbf{6.16 \text{ ms}}$$