

19	30	50	10	70
8	1	1	1	1
30	40	60	70	20
40	8	30	10	34
8	0	60	10	18
0	0	70	20	11
0	0	10	60	0

(Row minning method)

$$\Rightarrow 7 \times 10 + 8 \times 30 + 1 \times 40 + 5 \times 40 + 6 \times 70 + 7 \times 20$$

$$= 70 + 240 + 40 + 200 + 420 + 140$$

$$= 1110$$

5	19	30	50	10	70
8	1	1	1	1	1
30	40	60	70	20	34
40	8	30	10	60	18
8	0	60	10	70	11
0	0	10	60	0	0

(Column minning method)

$$\Rightarrow 5 \times 19 + 2 \times 10 + 7 \times 40 + 2 \times 60 + 8 \times 3 + 10 \times 20$$

$$= 95 + 20 + 280 + 120 + 64 + 200$$

$$= 779$$

MP Home Assignment-1

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S. Mitha

i) Decision variables:

x_1 and x_2 denote no. of pants and jackets.

ii) Objective function:

Profit on x_1 pants = $50x_1$

Profit on x_2 jackets = $40x_2$

Let $z = 50x_1 + 40x_2$, which is O.F

$$\max z = 50x_1 + 40x_2$$

iii) Constraints:

item	Pants	jacket	Availability
silk	2	1	1000
cotton	1	1.5	750
Price	50	40	

$$2x_1 + x_2 \leq 1000$$

$$x_1 + 1.5x_2 \leq 750$$

iv) Non negative:

$$x_1, x_2 \geq 0$$

$$\max z = 50x_1 + 40x_2$$

$$2x_1 + x_2 \leq 1000$$

$$x_1 + 1.5x_2 \leq 750$$

$$x_1, x_2 \geq 0$$