MP-1 TUTORIAL-5

1. Develop a python program to demonstrate the Initial Basic Solution in Transportation problem using NW method in Linear Programming (Steppingstone).

QUESTION:

The Amulya Milk Company has three plants located throughout a state with production capacity 50, 75 and 25 gallons. Each day the firm must furnish its four retail shops R_1, R_2, R_3& R_4 with at least 20, 20, 50, and 60 gallons respectively. The transportation costs (in Rs.) are given below.

Plant	**Retail Shop**				**Supply**
	R_1	**R_2**	**R_3**	**R_4**	
P_1	3	5	7	6	50
P_2	2	5	8	2	75
P_3	3	6	9	2	25
Demand	20	20	50	60	

The economic problem is to distribute the avaiSESSIONle product to different retail shops in such a way so that the total transportation cost is minimum.

MP-1
190031249 Tutorial-5
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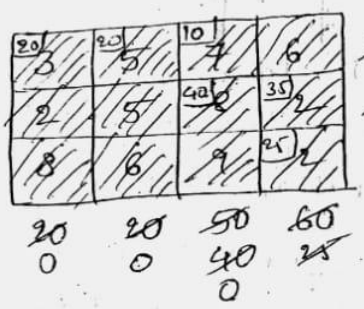
plant	Retail Shop				supply
	R_1	R_2	R_3	R_4	
P_1	3	5	7	6	50
P_2	2	5	8	2	75
P_3	8	6	9	2	25
Demand	20	20	50	60	150

By using NW Method



50 30 10 0
75 35 0
25
20 20 50 60
0 0 40 25
0

Minimum Transportation cost =
20*3 + 20*5 + 10*7 + 40*8 + 35*2 + 25*2
60 + 100 + 70 + 320 + 70 + 50
670