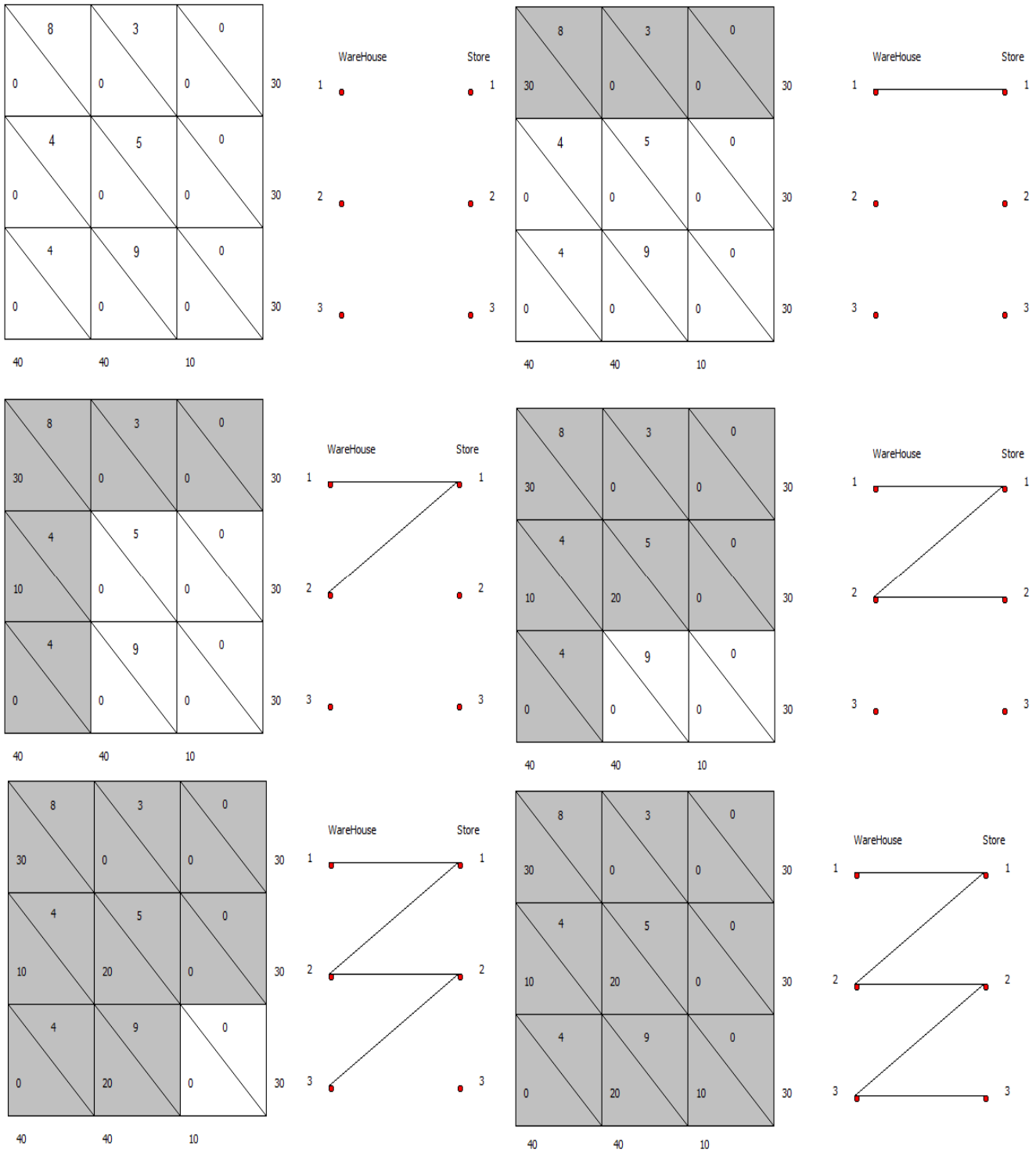
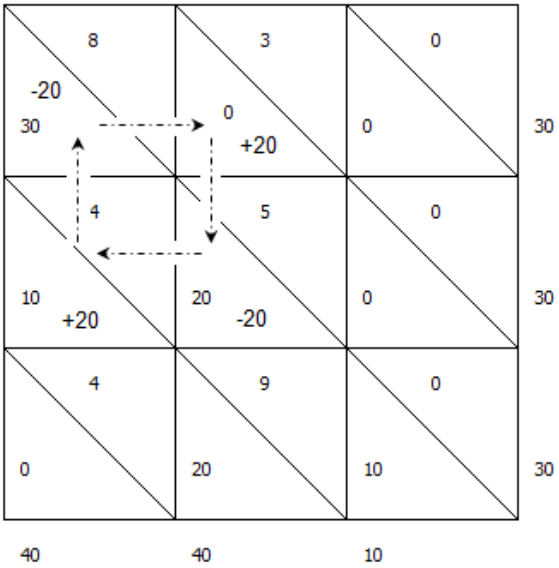


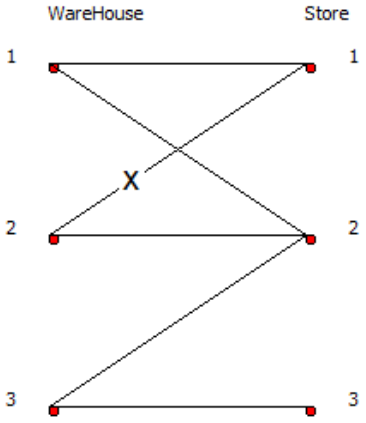
The total cost (by NWCST method) = $30\times8+10\times4+20\times5+20\times9+10\times0=560\$$

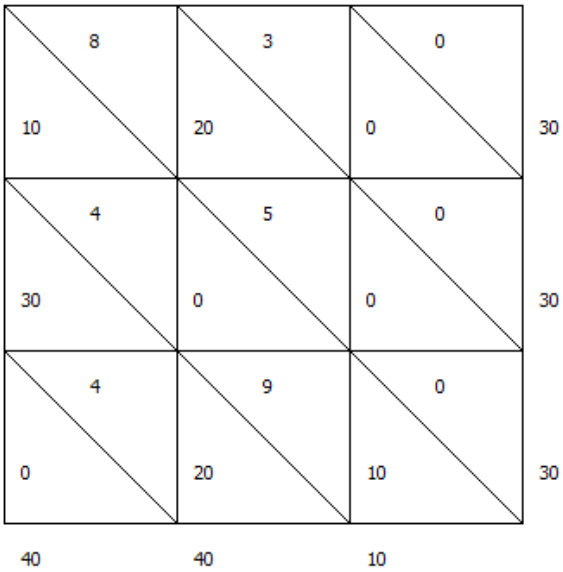
u1: 10 v1: 18
u2: 14 v2: 19
u3: 10 v3: 10

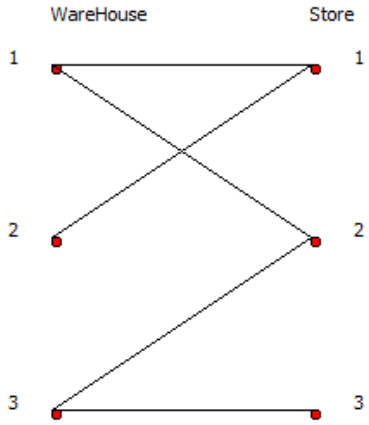
c12: 3 v2 - u1: 9 => decrease of $6
c13: 0 v3 - u1: 0 => decrease of $0
c23: 0 v3 - u2: -4 => decrease of $-4
c31: 4 v1 - u3: 8 => decrease of $4

Maximum reduction in transportation cost is given by c12, hence add edge (1,2) to the exisiting spanning tree





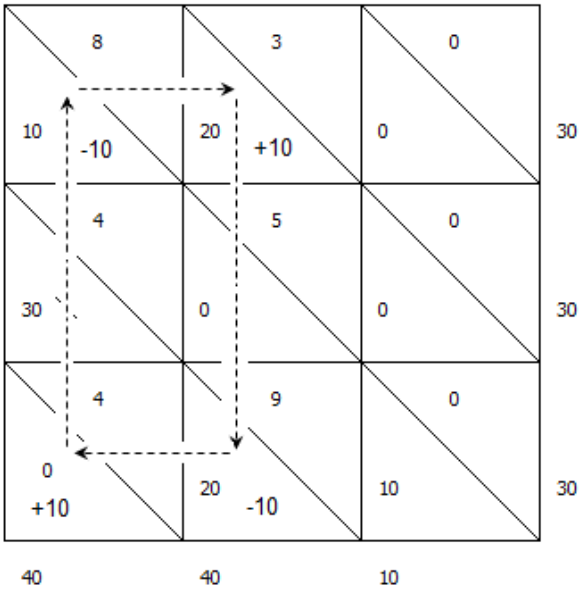


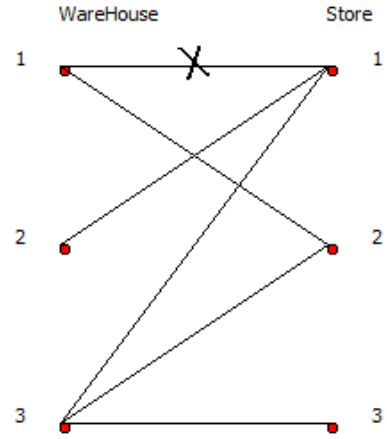


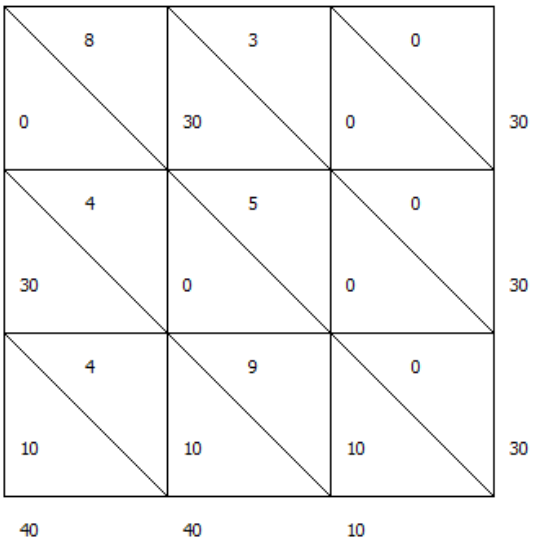
Total cost = 440

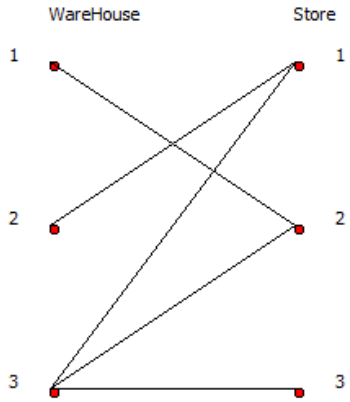
u1: 10 v1: 18
u2: 14 v2: 13
u3: 4 v3: 4

c13: 0 v3 - u1: -6 => decrease of $-6
c22: 5 v2 - u2: -1 => decrease of $-6
c23: 0 v3 - u2: -10 => decrease of $-10
c31: 4 v1 - u3: 14 => decrease of $10







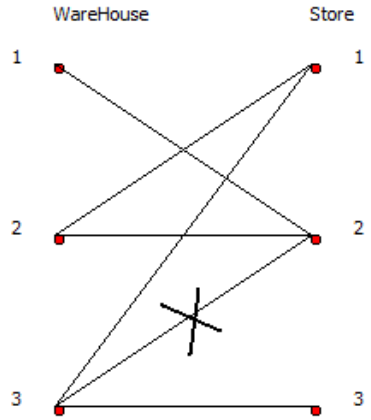


Total cost = 340

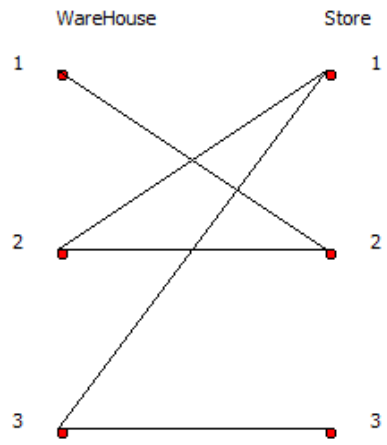
u1: 10 v1: 8
u2: 4 v2: 13
u3: 4 v3: 4

c11: 8 v1 - u1: -2 => decrease of $-10
c13: 0 v3 - u1: -6 => decrease of $-6
c22: 5 v2 - u2: 9 => decrease of $4
c23: 0 v3 - u2: 0 => decrease of $0

8 / 0	3 / 30	0 / 0	30
4 / 30 -10	5 / 0 +10	0 / 0	30
4 / 10 +10	9 / 10 -10	0 / 10	30
40	40	10	



8 / 0	3 / 30	0 / 0	30
4 / 20	5 / 10	0 / 0	30
4 / 20	9 / 0	0 / 10	30
40	40	10	



u1: 10 v1: 12
u2: 8 v2: 13
u3: 8. v3: 8

c11: 8 v1 - u1: 2 = > decrease of $-6
c13: 0 v3 - u1: - 4 = > decrease of $-4
c23: 0 v3 - u2: 0 = > decrease of $0
c32: 9 v2 - u3: 4 = > decrease of $-5

Reached the Optimal Solution.

Optimal cost = 300$