

## Practical 4

1	0	10	15	20
2	5	0	9	10
3	6	13	0	12
4	8	8	9	0

Q. A traveling salesman is getting ready for a big sales tour. Starting at his hometown, suitcase in hand, he will conduct a journey in which each of his target cities is visited exactly once before he returns home. Given the pairwise distances between cities, what is the best order in which to visit them, so as to minimize the overall distance traveled?

Input:

Starting vertex: 1,2,3,4

Output:

Path: 1 2 4 3 1, Cost of travelling is: 35

1 4 3 2 1,

1 3 4 2 1

1 3 2 4 1

2 1 4 3 2

1 2 4 3 1

1 2 4 3 1

No of vertices	Paths	Cost	Time
4	1, 1 2 4 3 1 2, 1 4 3 2 1 3, 1 3 4 2 1 4, 1 3 2 4 1	35 34 45 30	60ms 111ms 70 69
6			
8			

Analysis: One paragraph

