Question: Suppose a network of roads is depicted using a graph and you nedd to travel from one station to another. Suppose the distanc between each pair is given. Also the maximum speed in kn/hr possible between each pair of stations changes after each hour depending on the traffic (it changes after every hour). Find the route that shuld be reached in minimum time.

We will be using Floyd-Warshall algorithm in this. I chose 14 tourist spots in jaipur. The maximum speeds are approximated.

0. Amer fort
1. City Palace
2. Nahargarh fort
3. Bapu bazar
4. Hawa Mahal
5. Jantar Mantar
6. Jal Mahal
7. Albert Hall Museum
8. Jaigarh fort
9. Chokhi Dhani
10. Raj mandir cinema
11. Birla Mandir
12. Rambagh Palace
13. Central Park

Now, every tourist location is coded with numbers. We will be using adjacency matrix as a representation of distance between the points.

table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	0	8.3	9999	9999	9999	8.2	9999	9999	9999	9999	9999	9999	9999	9999
2	8.3	0	14	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999
3	9999	14	0	15	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999
4	9999	9999	15	0	0.8	9999	6.6	9999	9999	9999	9999	9999	9999	9999
5	9999	9999	9999	0.8	0	0.7	9999	9999	9999	9999	9999	9999	9999	9999
6	8.2	9939 9	9999	9999	0.7	0	9999	9999	9999	9999	9999	9999	9999	9999
7	9999	9999	9999	6.6	9999	9999	0	6.0	9999	9999	9999	9999	9999	9999
8	9999	9999	9999	9999	9999	9999	6.0	0	12	19	9999	9999	9999	9999
9	9999	9999	9999	9999	9999	9999	9999	12	0	32	13	9999	9999	9999
10	9999	9999	9999	9999	9999	9999	9999	19	32	0	9999	9999	9999	9999
11	9999	9999	9999	9999	9999	9999	9999	9999	13	9999	0	4.1	9999	3.6
12	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999	4.1	0	1.4	9999

13	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999	1.4	0	0.9
14	9999	9999	9999	9999	9999	9999	9999	9999	9999	9999	3.6	9999	0.9	0

9999: no edge