**Traveling Salesman Problem**

* Salesman should visit ‘n’ cities.
* The cost of traveling is non-negative c(i,j) to travel from city i to j.
* Let i be the starting vertex, S be the set of remaining vertices except i , let k be any vertex of S & g(i,S) be minimum travel cost for salesperson.

Then, recurrence relation can be defined as:

g(i,S)=minkes{Cik+g(k,S-(k))}

Example:

