**Dynamic Programming**

Task: From a given vertex in a weighted connected graph, find shortest paths to other vertices using Dijkstra's algorithm.

**Instructions**: You have given a map of distances of cities of a division. Your task is to develop a program for finding the shortest paths to other cities from the given city using Dijkstra’s algorithm. The map can be read from a file “city-map.txt”. The following are the sample input and output

Sample input:

0 5 12 17 999

999 0 999 8 7

999 999 0 9 999

999 999 999 999 0

Sample output:



Note: Your input file should contain more than 3 input cases and you have to find the optimal solution using Dijkstra’s algorithm. Finally draw a graph of number for number cities vs required times.