```
class Node
{
        dist [20]
        from [20]
}

        rt [10] = Node ()
costmat [20][20]
        print (" Enter the number of nodes ")
        nodes = int (input())
        print (" Enter the cost of matrix ")
        for i in range (0, nodes) :
            for j in range (0, nodes) :
                costmat [i][j] = int (input())
                rt [i]. dist [j] = costmat [i][j]
                rt [i]. from [j] = j


        while count ! = 0 :
            for i in range (0, nodes) :
                for j in range (0, nodes) :
                    for k in range (0, nodes):
                        if rt[i].dist [j] > costmat [i][k] +
                                                rt [k]. dist [j]
                          . rt [i]. dist [j] = rt [i]. dist [k]
                                        + rt [k]. dist [j]
                        rt [i]. from [j] = k
                        count + = 1
```