CODIGO EN PYTHON

```
import time
start_time = time.time()
def leerGraph(filename):

    adyacenciaList = []

    lineas = open(filename).read().splitlines()

    for line in lineas:

        adyacenciaList.append([])
        data = line.split()
        v = int(data[0])-1

        for tpl in data[1:]:

            ts, ws = tpl.split(',')
            t = int(ts)-1
            w = int(ws)

            adyacenciaList[v].append((t, w))

    return adyacenciaList


def extract_min(pq, peso):

    i = 0
    j = 1
    m = peso[pq[0]]

    while j < len(pq):
        if peso[pq[j]] < m:
            i = j
            m = peso[pq[j]]
        j += 1

    res = pq[i]

    pq[i] = pq[-1]
    pq.pop()

    return res
```

```
def dijkstraCaminoCortos(graph, s):


    infinit = 1000000

    peso = [infinit]*len(graph)
    peso[s] = 0

    pqueue = [i for i in range(len(graph))]

    visitado = [False]*len(graph)

    while len(pqueue) > 0:

        v = extract_min(pqueue, peso)
        visitado[v] = True

        for inc, w in graph[v]:
            if not visitado[inc]:
                peso[inc] = min(peso[inc], peso[v]+w)

    return peso


def main():

    orden = [7,37,59,82,99,115,133,165,188,197]

    graph = leerGraph('dijkstraData.txt')
    peso = dijkstraCaminoCortos(graph, 0)

    res = []
    for i in orden:
        res.append(str(peso[i-1]))

    print(','.join(res))
    print("--- %s seconds ---" % (time.time() - start_time))


if __name__ == '__main__':
    main()
```