

- Distance Vector -

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class Topology:

def \_\_init\_\_(self, a):

self.nodes = a

self.edges = []

def dvr(self):

import collections

for node in self.nodes:

dist = collections.defaultdict(input)

nh = {node: node}

for other in self.nodes:

if other != node:

dist[other] = 10000

for i in range(len(self.nodes)-1):

for edge in ~~self~~ self.edges:

s, d, c = edge

if dist[s] + c < dist[d]:

dist[d] = dist[s] + c

if s == node: then nh[d] = d

elif s in nh:

nh[d] = nh[s]

for dest, cost in dist.items():

if cost:

print(f'{dest} {cost} {nh[dest]}')

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