

```
import math

INFINI = math.inf
NEIGHBOURS = "neighbours"

def roy-floyd-warshall(graph):
    distances = {}
    steps = {}
    for origin in graph:
        steps[origin] = {}
        distances[origin] = {}
        for destination in graph:
            steps[origin][destination] = None
            distances[origin][destination] = INFINI
            if destination in graph[origin][NEIGHBOURS]:
                distances[origin][destination] =
graph[origin][NEIGHBOURS][destination]
            distances[origin][origin] = 0
        for step in graph:
            for origin in graph:
                for destination in graph:
                    if distances[origin][step] + distances[step][destination] <
distances[origin][destination]:
                        distances[origin][destination] = distances[origin][step]
+ distances[step][destination]
                        steps[origin][destination] = step
    return steps, distances
```

From:

<https://wiki.centrale-med.fr/informatique/> - **WiKi informatique**

Permanent link:

[https://wiki.centrale-med.fr/informatique/jour\\_tp\\_chemin:roy](https://wiki.centrale-med.fr/informatique/jour_tp_chemin:roy)

Last update: **2018/12/04 12:00**

