

```
1 nV=4
2 INF=9999999999
3 def floyd_warshall(G):
4     distance = list(map(lambda i: list(map(lambda j: j, i)), G))
5     for k in range(nV):
6         for i in range(nV):
7             for j in range(nV):
8                 distance[i][j] = min(distance[i][j], distance[i][k] + distance[k][j])
9     print_solution(distance)
10 def print_solution(distance):
11     for i in range(nV):
12         for j in range(nV):
13             if(distance[i][j] == INF):
14                 print("INF", end=" ")
15             else:
16                 print(distance[i][j], end=" ")
17         print(" ")
18 G = [[0, 3, INF, 5],
19      [2, 0, INF, 4],
20      [INF, 1, 0, INF],
21      [INF, INF, 2, 0]]
22 floyd_warshall(G)
```

print\_solution() for i in range(nV) for j in range(nV) else

Download pre-built shared indexes: Reduce the indexing time and CPU load with pre-built Python packages shared indexes // Always download (yesterday 13:05) 16/48 CRLF UTF-8 4 spaces Python 3.10 (pythonProject2)

File Edit View Navigate Code Refactor Run Tools VCS Window Help pythonProject2 - C:\Users\kadi\AppData\Roaming\JetBrains\PyCharmCE2022.1\scratches\floyds.py

Scratches floyds.py

Project

- copy the program recursive.py
- fact non recursive.py
- fact recursive.py
- fib non recursive.py
- fib recursive.py
- floyds.py
- gcd non recursive.py
- gcd recursive.py
- knapsack.py
- lcm non recursive.py
- lcm recursive.py
- max and min.py

```
11 for i in range(nV):
12     for j in range(nV):
13         if(distance[i][j] == INF):
14             print("INF", end=" ")
15         else:
16             print(distance[i][j], end=" ")
17     print(" ")
18 G = [[0, 3, INF, 5],
19      [2, 0, INF, 4],
20      [INF, 1, 0, INF],
21      [5, 3, 2, 0]]
22 print_solution()
```

Run: floyds (1) x

C:\Users\kadi\PycharmProjects\pythonProject2\venv\Scripts\python.exe C:/Users/kadi/AppData/Roaming/JetBrains/PyCharmCE2022.1/scratches/floyds.py

```
0 3 7 5
2 0 6 4
3 1 0 5
5 3 2 0
```

Process finished with exit code 0

