```python
# Number of vertices
nV = 4
INF = 999

# Algorithm
def floyd(G):
    dist = [list(row) for row in G]

    # Adding vertices individually
    for r in range(nV):
        for p in range(nV):
            for q in range(nV):
                dist[p][q] = min(dist[p][q], dist[p][r] + dist[r][q])
    sol(dist)

# Printing the output
def sol(dist):
    for p in range(nV):
        for q in range(nV):
            if(dist[p][q] == INF):
                print("INF", end=" ")
            else:
                print(dist[p][q], end="  ")
        print(" ")

G = [[0, 5, INF, INF],
     [50, 0, 15, 5],
     [30, INF, 0, 15],
     [15, INF, 5, 0]]
floyd(G)
```