Write the Python to Implement Travelling Salesman Problem.

import itertools

def tsp(graph, start=0):

nodes = list(range(len(graph)))

nodes.remove(start)

min\_cost, best\_path = float('inf'), []

for perm in itertools.permutations(nodes):

path = [start] + list(perm) + [start]

cost = sum(graph[path[i]][path[i+1]] for i in range(len(path)-1))

if cost < min\_cost:

min\_cost, best\_path = cost, path

return best\_path, min\_cost

# Example Graph (distance matrix)

graph = [

[0, 10, 15, 20],

[10, 0, 35, 25],

[15, 35, 0, 30],

[20, 25, 30, 0]

]

path, cost = tsp(graph)

print("Best Path:", path)

print("Minimum Cost:", cost)

