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In [2]: ▶ from sys import maxsize
from itertools import permutations
v=4
def travellingSalesPersonProblem(graph,s):
    vertex=[]
    for i in range(v):
        if i!=s:
            vertex.append(i)
    min_path=maxsize
    next_permutation=permutations(vertex)
    for i in next_permutation:
        current_pathweight=0
        k=s
        for j in i:
            current_pathweight+=graph[k][j]
            k=j
        current_pathweight+=graph[k][s]
        min_path=min(min_path,current_pathweight)
    return min_path

if __name__=="__main__":
    graph=[[0,10,15,20],[10,0,35,25],[15,35,0,30],[20,25,30,0]]
    s=0
    print(travellingSalesPersonProblem(graph,s))
```

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In []: ▶