

ject

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

hamiltonian.py

knapsack.py

lcm non recursive.py

lcm recursive.py

max and min.py

max non recursive.py

max recursive.py

mergesort.py

MST.py

multiplication non recursive.py

multiplication recursive.py

n-queens.py

optimal BST.py

palindrome non recursive.py

palindrome recursive.py

prime or not non recursive.py

prime or not recursive.py

scratch\_2.py

prime or not non recursive.py

MST.py

hamiltonian.py

B&B Travelling salesman.py

sum of subsets.py

scratch\_2.py

```
1 from sys import maxsize
2 from itertools import permutations
3 V = 4
4 def travellingSalesmanProblem(graph, s):
5     vertex = []
6     for i in range(V):
7         if i != s:
8             vertex.append(i)
9     min_path = maxsize
10    next_permutation = permutations(vertex)
11    for i in next_permutation:
12        current_pathweight = 0
13        k = s
14        for j in i:
15            current_pathweight += graph[k][j]
16            k = j
17        current_pathweight += graph[k][s]
18        min_path = min(min_path, current_pathweight)
19    return min_path
20 if __name__ == "__main__":
21     graph = [[0, 10, 15, 20], [10, 0, 35, 25],
22             [15, 35, 0, 30], [20, 25, 30, 0]]
23     travellingSalesmanProblem()
```

Project

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prime or not non recursive.py x MST.py x hamiltonian.py x 8&8 Travelling salesman.py x sum of subsets.py x scratch\_2.py x

```
14     for j in range(1, n):
15         current_pathweight += graph[k][j]
16         k = j
17         current_pathweight += graph[k][s]
18         min_path = min(min_path, current_pathweight)
19     return min_path
20 if __name__ == "__main__":
21     graph = [[0, 10, 15, 20], [10, 0, 35, 25],
22             [15, 35, 0, 30], [20, 25, 30, 0]]
23     s = 0
24     print(travellingSalesmanProblem(graph, s))
25
```

travellingSalesmanProblem() for i in next\_permutation

scratch\_2 x

C:\Users\kativ\PycharmProjects\pythonProject2\venv\Scripts\python.exe C:/Users/kativ/AppData/Roaming/JetBrains/PyCharmCE2022.1/scratches/scratch\_2.py

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