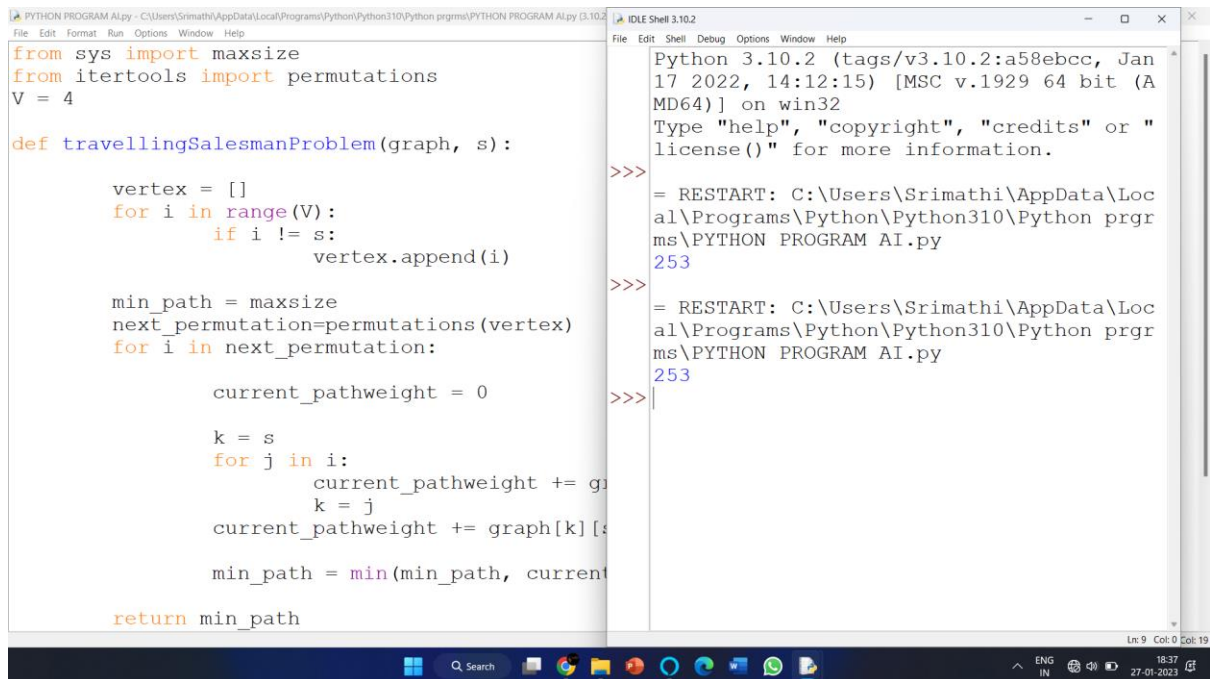


## Travelling salesman problem:



The image shows a screenshot of a Python IDE with two windows. The left window, titled 'PYTHON PROGRAM AI.py', contains the following code:

```
from sys import maxsize
from itertools import permutations
V = 4

def travellingSalesmanProblem(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
```

The right window, titled 'IDLE Shell 3.10.2', shows the output of the program:

```
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan
17 2022, 14:12:15) [MSC v.1929 64 bit (A
MD64)] on win32
Type "help", "copyright", "credits" or "
license()" for more information.
>>>
= RESTART: C:\Users\Srimathi\AppData\Loc
al\Programs\Python\Python310\Python prgr
ms\PYTHON PROGRAM AI.py
253
>>>
= RESTART: C:\Users\Srimathi\AppData\Loc
al\Programs\Python\Python310\Python prgr
ms\PYTHON PROGRAM AI.py
253
>>>
```

The taskbar at the bottom shows the Windows taskbar with various icons and the system clock displaying 18:37 on 27-01-2023.