Exercise 164:-
4. Write a c program to find the minimum path distance by using matrix form.

Program:-
```
def min_path_cost(cost):
    m = len(cost)
    n = len(cost[0])
    dp = [[0 for _ in range(n)] for _ in range(m)]
    dp[0][0] = cost[0][0]
    for i in range(1, m):
        dp[i][0] = dp[i - 1][0] + cost[i][0]
    for j in range(1, n):
        dp[0][j] = dp[0][j - 1] + cost[0][j]
    for i in range(1, m):
        for j in range(1, n):
            dp[i][j] = cost[i][j] + min(dp[i - 1][j], dp[i][j - 1], dp[i - 1][j - 1])
    return dp[m - 1][n - 1]
cost = [
    [1, 2, 3],
    [4, 8, 2],
    [1, 5, 3]
]
print(f"Minimum cost path is {min_path_cost(cost)}")
```
Output:-
```
C:\Users\afree\PycharmProjects\pythonProject\.venv\Scripts\python.exe C:\Users\afree\PycharmProjects\pythonProject\0.py
Minimum cost path is 8

Process finished with exit code 0
```
Time complexity:- O(m*n)