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DAA

screenrec

EXPLORER

DAA

.vscode

a.exe

BinarySearch.cpp

BubbleSort.cpp

HalfLinearSearch.cpp

InsertionSort.cpp

LinearSearch.cpp

LinearSearch.exe

SelectionSort.cpp

travelling_salesman_problem.cpp

travelling_salesman_problem.cpp

travelling_salesman_problem.cpp

main()

1 // Travelling_salesman_problem, Name: Maniyar Danish Shadulla, Reg.No: 2020BIT028

2 #include <bits/stdc++.h>

3 using namespace std;

4 #define V 4

5 int travllingSalesmanProblem(int graph[][V], int s){

6 vector<int> vertex;

7 for (int i = 0; i < V; i++)

8 if (i != s)

9 vertex.push_back(i);

10 int min_path = INT_MAX;

11 do {

12 int current_pathweight = 0;int k = s;

13 for (int i = 0; i < vertex.size(); i++) {

14 current_pathweight += graph[k][vertex[i]];

15 k = vertex[i];

16 }

17 current_pathweight += graph[k][s];

18 min_path = min(min_path, current_pathweight);

19 } while (next_permutation(vertex.begin(), vertex.end()));

20 return min_path;}

21 int main(){

22 int graph[][V] = { { 0, 100, 15, 20 }, { 10, 0, 15, 25 }, { 15, 35, 0, 30 }, { 20, 25, 3, 0 } };

23 int s = 0;

24 cout << travllingSalesmanProblem(graph, s) << endl;

25 return 0;

26 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

powerShell

PS C:\Users\Optimal\Desktop\DAA> g++ travelling_salesman_problem.cpp

PS C:\Users\Optimal\Desktop\DAA> .\a.exe

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PS C:\Users\Optimal\Desktop\DAA>

Ln 26, Col 2 Spaces: 4 UTF-8 CRLF C++ Win32

22°C Mostly cloudy

ENG IN

10:20 PM 2/6/2023



