Travelling sale’sman program

**#include <stdio.h>**

**Int matrix[25][25], visited\_cities[10], limit, cost = 0;**

**Int tsp(int c)**

**{**

**Int count, nearest\_city = 999;**

**Int minimum = 999, temp;**

**For(count = 0; count < limit; count++)**

**{**

**If((matrix[c][count] != 0) && (visited\_cities[count] == 0))**

**{**

**If(matrix[c][count] < minimum)**

**{**

**Minimum = matrix[count][0] + matrix[c][count];**

**}**

**Temp = matrix[c][count];**

**Nearest\_city = count;**

**}**

**}**

**If(minimum != 999)**

**{**

**Cost = cost + temp;**

**}**

**Return nearest\_city;**

**}**

**Void minimum\_cost(int city)**

**{**

**Int nearest\_city;**

**Visited\_cities[city] = 1;**

**Printf(“%d “, city + 1);**

**Nearest\_city = tsp(city);**

**If(nearest\_city == 999)**

**{**

**Nearest\_city = 0;**

**Printf(“%d”, nearest\_city + 1);**

**Cost = cost + matrix[city][nearest\_city];**

**Return;**

**}**

**Minimum\_cost(nearest\_city);**

**}**

**Int main()**

**{**

**Int i, j;**

**Printf(“Enter Total Number of Cities:\t”);**

**Scanf(“%d”, &limit);**

**Printf(“\nEnter Cost Matrix\n”);**

**For(i = 0; i < limit; i++)**

**{**

**Printf(“\nEnter %d Elements in Row[%d]\n”, limit, i + 1);**

**For(j = 0; j < limit; j++)**

**{**

**Scanf(“%d”, &matrix[i][j]);**

**}**

**Visited\_cities[i] = 0;**

**}**

**Printf(“\nEntered Cost Matrix\n”);**

**For(i = 0; i < limit; i++)**

**{**

**Printf(“\n”);**

**For(j = 0; j < limit; j++)**

**{**

**Printf(“%d “, matrix[i][j]);**

**}**

**}**

**Printf(“\n\nPath:\t”);**

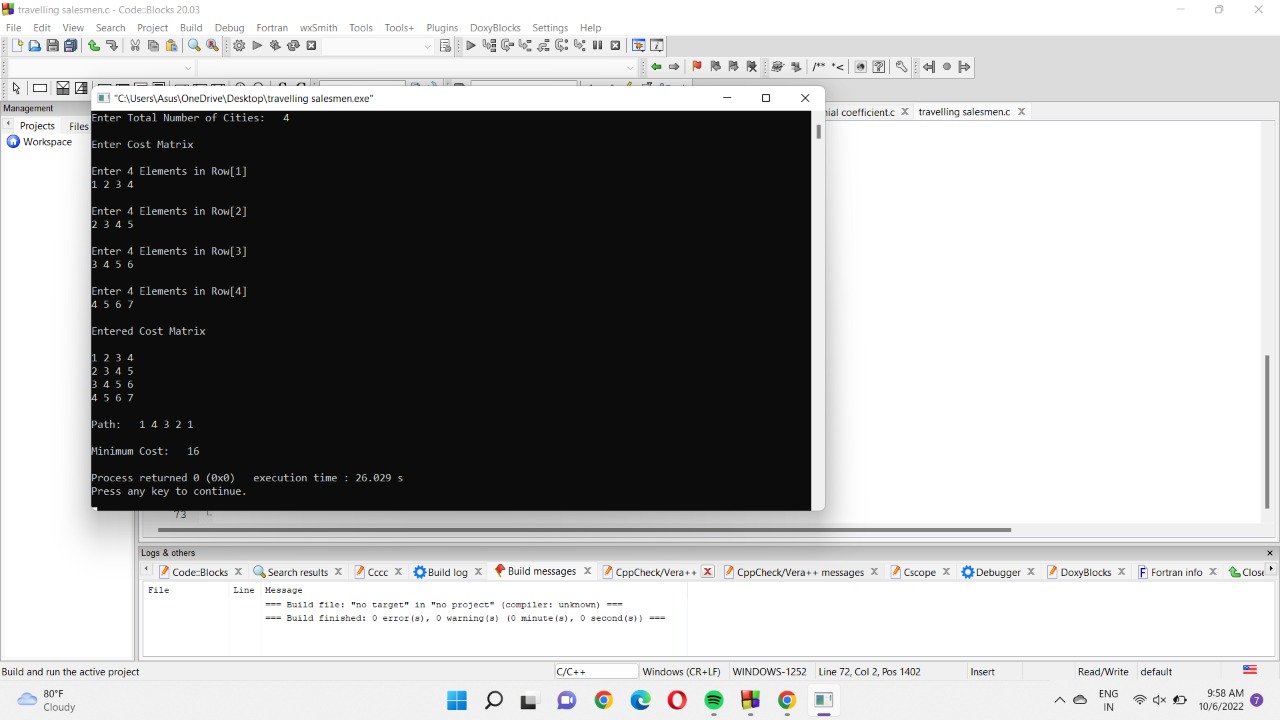
**Minimum\_cost(0);**

**Printf(“\n\nMinimum Cost: \t”);**

**Printf(“%d\n”, cost);**

**Return 0;**

**}**

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