1.Given a matrix cost of size n where cost[i][j] denotes the cost of moving from city i to city j. Your task is to complete a tour from city 0 (0-based index) to all other cities such that you visit each city exactly once and then at the end come back to city 0 at minimum cost with path.

1.Input: cost = {{0,1000,5000},

{5000,0,1000},

{1000,5000,0}}

Output: 3000

Explanation: We can visit 0->1->2->0 and

cost = 1000+1000+1000 = 3000

2. Input: cost = {{0, 100, 200, 300},

{100, 0, 500, 200},

{200, 500, 0, 700}

{300, 200, 700, 0}}

output : 1200

Explanation: We can visit 0->1->3->2->0 and

cost = 100 + 200 + 700 + 200

2. **Title:** Deepest File Path Finder in a Directory Structure

Description: You need to implement a function that constructs a hierarchical representation of a file system based on user input and returns path of the file located at the deepest level of the provided root directory.

The input will consist of a series of commands that define folders and files in a directory structure. Your program should build this structure and then determine the file located at the deepest level. If there are multiple deepest files, return one of their paths.

Input:

1. A string root representing the name of the root folder.
2. A list of operations in the following format:
   - Each operation is either a folder name or a file name.
   - To indicate no more subfolders or files, the input will be "n/a".

Output: A list of strings representing the path to one of the files found at the deepest level of the directory hierarchy.
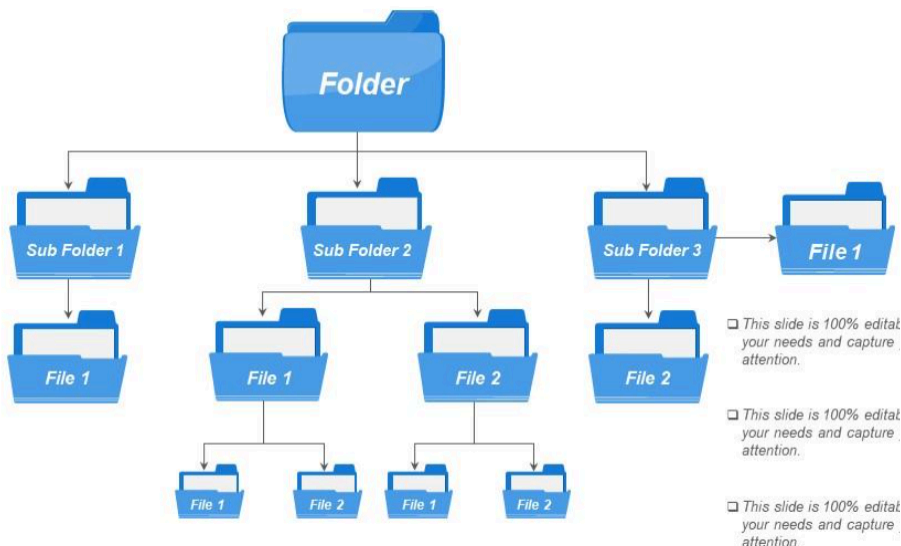
Sample Input:

Enter the root folder :

Folder

Enter The Sub-Folder Name for : Folder

SubFolder1

Enter The Sub-Folder Name for : Folder

SubFolder2

Enter The Sub-Folder Name for : Folder

SubFolder3

Enter The Sub-Folder Name for : Folder

n/a

Enter The Sub-Folder Name for : SubFolder1

File1

Enter The Sub-Folder Name for : SubFolder1

n/a

Enter The Sub-Folder Name for : SubFolder2

File1

Enter The Sub-Folder Name for : SubFolder2

File2

Enter The Sub-Folder Name for : SubFolder2

n/a

Enter The Sub-Folder Name for : SubFolder3

File1

Enter The Sub-Folder Name for : SubFolder3

File2

Enter The Sub-Folder Name for : SubFolder3

n/a

Enter The Sub-Folder Name for : File1

n/a

Enter The Sub-Folder Name for : File1

File1

Enter The Sub-Folder Name for : File1

n/a

Enter The Sub-Folder Name for : File2

File1

Enter The Sub-Folder Name for : File2

File2

Enter The Sub-Folder Name for : File2

n/a

Enter The Sub-Folder Name for : File1

n/a

Enter The Sub-Folder Name for : File2

n/a

Enter The Sub-Folder Name for : File1

n/a

Enter The Sub-Folder Name for : File1

n/a

Enter The Sub-Folder Name for : File2

n/a

Output: [Folder, SubFolder2, File1, File1]