

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(n) time | O(d) space - where n is the number of people
4 // in the org and d is the depth (height) of the org chart
5 function getLowestCommonManager(topManager, reportOne, reportTwo) {
6   return getOrgInfo(topManager, reportOne, reportTwo).lowestCommonManager;
7 }
8
9 function getOrgInfo(manager, reportOne, reportTwo) {
10   let numImportantReports = 0;
11   for (const directReport of manager.directReports) {
12     const orgInfo = getOrgInfo(directReport, reportOne, reportTwo);
13     if (!orgInfo.lowestCommonManager) return orgInfo;
14     numImportantReports += orgInfo.numImportantReports;
15   }
16   if (manager === reportOne || manager === reportTwo) numImportantReports++;
17   const lowestCommonManager = numImportantReports === 2 ? manager : null;
18   return {lowestCommonManager, numImportantReports};
19 }
20
21 exports.getLowestCommonManager = getLowestCommonManager;
22
```

Solution 1

Solution 2

Solution 3

```
1 function getLowestCommonManager(topManager, reportOne, reportTwo) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.getLowestCommonManager = getLowestCommonManager;
7
```

Our Tests

Custom Output

Submit Code

```
1 // Test 1
2 // Input: topManager = {id: 1, directReports: [{id: 2}, {id: 3}]}, reportOne = 2, reportTwo = 3
3 // Output: {lowestCommonManager: 1, numImportantReports: 2}
4
5 // Test 2
6 // Input: topManager = {id: 1, directReports: [{id: 2}, {id: 3}, {id: 4}]}, reportOne = 2, reportTwo = 4
7 // Output: {lowestCommonManager: 1, numImportantReports: 3}
8
9 // Test 3
10 // Input: topManager = {id: 1, directReports: [{id: 2}, {id: 3}, {id: 4}]}, reportOne = 2, reportTwo = 3
11 // Output: {lowestCommonManager: 1, numImportantReports: 3}
12
```

Run or submit code when you're ready.