Our Solution(s) Run Code

Solution 1

```java
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import java.util.*;

class Program {
  // O(n) time | O(d) space - where n is the number of people
  // in the org and d is the depth (height) of the org chart
  public static OrgChart getLowestCommonManager(
      OrgChart topManager, OrgChart reportOne, OrgChart reportTwo) {
    return getOrgInfo(topManager, reportOne, reportTwo).lowestCommonM
  }

  public static OrgInfo getOrgInfo(OrgChart manager, OrgChart reportOn
    int numImportantReports = 0;
    for (OrgChart directReport : manager.directReports) {
      OrgInfo orgInfo = getOrgInfo(directReport, reportOne, reportTwo)
      if (orgInfo.lowestCommonManager != null) return orgInfo;
      numImportantReports += orgInfo.numImportantReports;
    }
    if (manager == reportOne || manager == reportTwo) numImportantRepo
    OrgChart lowestCommonManager = numImportantReports == 2 ? manager
    OrgInfo newOrgInfo = new OrgInfo(lowestCommonManager, numImportant
    return newOrgInfo;
  }

  static class OrgChart {
    public char name;
    public List<OrgChart> directReports;

    OrgChart(char name) {
      this.name = name;
      this.directReports = new ArrayList<OrgChart>();
    }
```

Your Solutions Run Code

Solution 1 Solution 2 Solution 3

```java
import java.util.*;

class Program {
  public static OrgChart getLowestCommonManager(
      OrgChart topManager, OrgChart reportOne, OrgChart reportTwo) {
    // Write your code here.
    return null;
  }

  static class OrgChart {
    public char name;
    public List<OrgChart> directReports;

    OrgChart(char name) {
      this.name = name;
      this.directReports = new ArrayList<OrgChart>();
    }

    // This method is for testing only.
    public void addDirectReports(OrgChart[] directReports) {
      for (OrgChart directReport : directReports) {
        this.directReports.add(directReport);
      }
    }
  }
}

```

Our Tests

Custom Output Submit Code

Run or submit code when you're ready.