

Case Study 4

Course(s): Java DSA

Day: 10

Problem Statement

Implement the Binary MLM Plan for an organization.

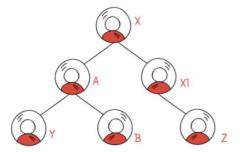
The binary MLM compensation plan is the most popular network marketing plan with rapid growth opportunities. The two-legged plan balances business and distributor growth by encouraging teamwork with attractive compensations.

The binary MLM plan is defined as a compensation plan that consists of two legs (left leg and right leg) or subtrees under every distributor.

Upon adding subtrees, a binary tree gets formed. New members joining after them are spilled over to the downlines or next business level.

Implement the below scenario

Distributor X sponsors two new members A & X1. They are added on the left and right leg as they were vacant. Distributor A then sponsors a new member B to the direct right leg. Meanwhile, distributor X has sponsored Y & Z. The binary tree looks now like



You need to implement this case study using Binary Tree Data Structure.

You must implement the below functionalities.

- 1. Distributor Class
- 2. MLM Tree Class
- 3. Suitable methods to the above classes to achieve functionality

Steps

- 1. Create a class Distributor, with suitable attributes (eg: name, phone, email, right, left etc.)
- 2. Create a class MLM Tree, with suitable attributes (eg: organizationNane, numOfDistributors, etc..)

- 3. Implement the following methods in MLM Tree Class:
 - a. insertRootDistributor(Distributor user)
 - b. sponsorNewDistributor(Distributor newDistributor, Distributor sponsor)
 - c. iterateTreeOfUser(User user)