**Given a binary tree and a sum, determine if the tree has a root-to-leaf path such that adding up all the values along the path equals the given sum.**

**public class** RootToLeafPathSum {  
  
 **public static boolean** hasPathSum(TreeNode node, **int** sum) {

//TODO for implementation  
 }

}

Examples:

*10  
 / \  
 8 2  
 / \ /  
 3 5 2*

RootToLeafPathSum.*hasPathSum*(testNode, 23) should return true;

RootToLeafPathSum.*hasPathSum*(testNode, 21) should return true;

RootToLeafPathSum.*hasPathSum*(testNode, 14) should return true;

RootToLeafPathSum.*hasPathSum*(testNode, 333) should return false;

RootToLeafPathSum.*hasPathSum*(testNode, 10) should return false;