**PJ 12 Report Your Name: Francisco Valadez**

**A. The following is my Java program:**

**// Please copy your Java program into here from your Eclipse window. The code must be colored.**

**// You must not copy Java program from your .java file since the code over there is not colored at all.**

**// You must not show screen prints here.**

// Author: Francisco Valadez  
// Date: 6/7/2021  
// Purpose: This program prints a binary tree!  
  
public class TreePlot   
{  
 public static int[][] T1 =   
 {  
 {5, 1, 2},  
 {3, 3, 4},  
 {7, 5, 6},  
 {2, -1, -1},  
 {4, -1, -1},  
 {6, -1, -1},  
 {9, -1, -1}  
   
 };  
  
 public static int[][] T2 =   
 {  
 {8, 1, 2},  
 {4, 3, 4},  
 {12, 5, 6},  
 {2, 7, 8},  
 {6, 9, 10},  
 {10, 11, 12},  
 {14, 13, 14},  
 {1, -1, -1},  
 {3, -1, -1},  
 {5, -1, -1},  
 {7, -1, -1},  
 {9, -1, -1},  
 {11, -1, -1},  
 {13, -1, -1},  
 {15, -1, -1}  
   
 };  
 public static int[][] T3 =   
 {  
 {5, 1, 2},  
 {3, 3, 4},  
 {7, 5, 6},  
 {2, 7, -1},  
 {4, -1, -1},  
 {6, 8, 9},  
 {9, -1, -1},  
 {1, -1, -1},  
 {8, -1, -1},  
 {10, -1, -1},  
   
 };  
  
 public static void print(int[][] array, int counter)  
 {  
 System.out.println("Binary tree #" + counter + " has " + array.length + " nodes.");  
 System.out.println("Its array dump is as follows: ");  
 System.out.println("\nIndex\tData\tLeft-link\tRight-link");  
 System.out.println("------\t-----\t---------\t----------");  
 for(int i = 0; i < array.length; i++)  
 {  
 System.out.println(i + "\t" + array[i][0] + "\t" + array[i][1] + "\t\t" + array[i][2]);  
 }  
  
 System.out.println("\nThe binary tree is plotted as follows:");  
 printTree(array, counter);  
 }  
  
 public static void printTree(int[][] array, int counter)  
 {  
 System.out.println("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" + array[0][0] + "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_");  
 System.out.println("\_\_\_\_\_\_\_\_\_" + array[1][0] + "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" + array[2][0] + "\_\_\_\_\_\_\_\_\_\_\_");  
 System.out.println("\_\_\_\_\_" + array[3][0] + "\_\_\_\_\_\_\_" + array[4][0] + "\_\_\_\_\_\_\_\_\_\_" + array[5][0] + "\_\_\_\_\_\_\_\_\_" + array[6][0] + "\_\_\_\_\_");  
 if(counter == 2)  
 System.out.println("\_\_\_" + array[7][0] + "\_\_\_" + array[8][0] + "\_\_\_" + array[9][0] + "\_\_\_" + array[10][0] + "\_\_\_\_\_" + array[11][0] + "\_\_\_\_" + array[12][0] + "\_\_\_\_\_" + array[13][0] + "\_\_\_\_\_" + array[14][0] + "\_");  
 if(counter == 3)  
 System.out.println("\_\_\_" + array[7][0] + "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_" + array[8][0] + "\_\_\_" + array[9][0] + "\_\_");  
 }  
  
 public static void main(String[] args)  
 {  
 System.out.println("Welcome to play this Binary Tree Plot Tool of Francisco Valadez!");  
 System.out.println("1========================================================");  
 print(T1, 1);  
 System.out.println("\n2========================================================");  
 print(T2, 2);  
 System.out.println("\n3========================================================");  
 print(T3, 3);  
 System.out.println("\n4========================================================");  
 System.out.println("Thank you for using this Binary Tree Plot Tool of Francisco Valadez");  
 System.out.println("5========================================================");  
  
  
 }  
}

**B. The following is the complete output of my 3 binary trees: [You must show 3 test cases.]**

**// Please copy your Eclipse console output into here.**

