# Binary Tree Problem

Implement a function to check if a binary tree is balanced. For the purposes of this question, a balanced tree is defined to be a tree such that the heights of the two subtrees of any node never differ by more than one.

## Solution

This solution is intended to run on Ruby 2.4.3 but should run on 2.3 and up. It takes advantage of the safe navigation operator. The solution implements the `BinaryTree` and `BinaryTreeNode` classes in `binary_tree.rb`. The node class has a method called `height` that recursively calculates its own height from its children nodes. This height method is used for calculating whether or not a node is balanced in the `balanced?` method.

## Running the Examples and Unit Tests

`run_example.rb` contains a couple of examples of the tree. You can run it with:

```
ruby run_example.rb
```

`test_binary_tree.rb` contains unit tests for the tree class. You can run it with:

```
ruby test_binary_tree.rb
```