

Twenty Questions FAQ

I keep getting a `NullPointerException`! Why is my overall root node always `null`?!

You may be reassigning the value of a *local* variable, rather than modifying the value of the overall root. See the "x = change(x)" slides in the binary search tree powerpoint and the `insert` method examples in the previous lab. If that doesn't help, see [here](#) (or Google "java pass by value" if the link ever breaks).

How do I know I'm at the "end" of the question tree?

An answer node (the game's guess at your object, i.e. not a question) will always be a leaf. In addition, its data element (String) will not end with a question mark. Branch nodes will always end in a "?".

How do I read the input file (the "actors.txt" example) in the lab?

The file builds the tree using a pre-order traversal. The preorder traversal of a binary tree visits the root first, then the left subtree of the root recursively, then finally the right subtree of the root recursively.

Why doesn't the test class compile?

If you're using Eclipse, you need to add the JUnit library to your project's build path. There are instructions in the lab doc.

Why does my code fail unit test N?

You did something wrong, you should probably figure out what and fix it.

...but how do I do that?

You can see the chain of steps (test methods) that lead to the failure; tests will run in numerical order. Also, each test method is named for what it does (or you could just look at what it is doing). Feel free to add print statements (e.g. printing the current node each step) or use the debugger on the test file.

I'm ready to run the unit tests but I have a ton of errors. What gives?

You're missing the unit test library. See the bottom of page 3 in the lab document.