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(**) Generate-and-test paradigm

Apply the generate-and-test paradigm to construct all symmetric, completely balanced binary trees with a given number of nodes.

An efficient solution, which takes the fact that a tree with an even number of nodes can't be symmetric into consideration:

```
symCbalTrees n = if n `mod` 2 == 0 then [] else
    [ Branch 'x' t (reverseTree t) | t <- cbalTree (n `div` 2)]

reverseTree Empty = Empty
reverseTree (Branch x l r) = Branch x (reverseTree r) (reverseTree l)
```

Or a simple, but less efficient one:

```
symCbalTrees = filter symmetric . cbalTree
```