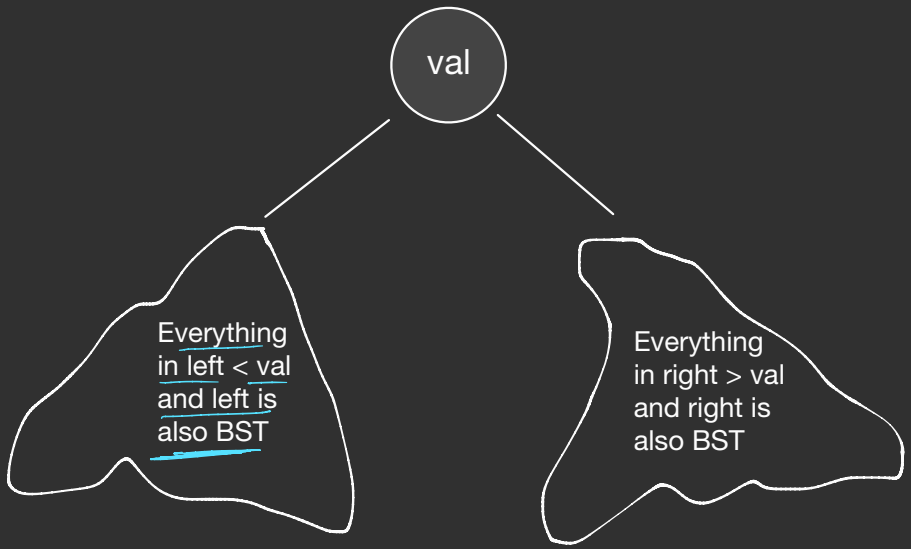
L76
BST and more Problem Solving

Join Discord - https://bit.ly/ly-discord

RECAP

What is a Binary Search Tree?



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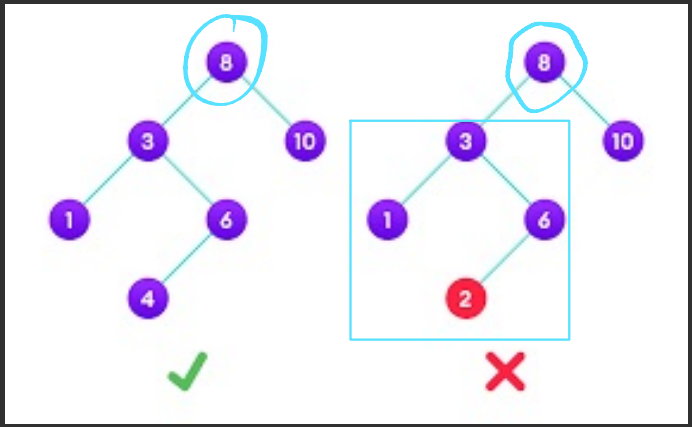
Example



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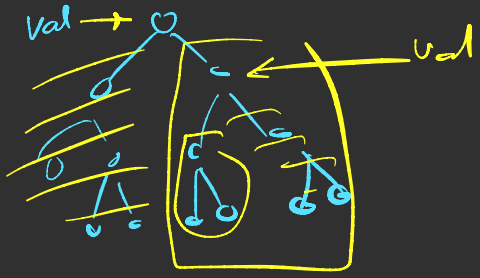


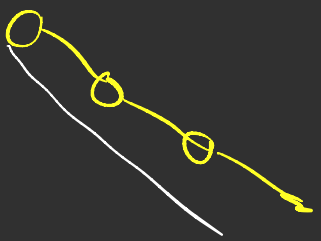
$n \to \frac{n}{2} \to \frac{n}{4} \to \frac{n}{8} \to \frac{n}{16} \cdots 1$

$\frac{n}{2^0} \quad \frac{n}{2^1} \quad \frac{n}{2^2} \cdots \cdots \quad \frac{n}{2^k}$

Why is it important?
Let's see using a simple problem

$\log n$

$O(h)$ → $\log n$ — n



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Let’s do some problems

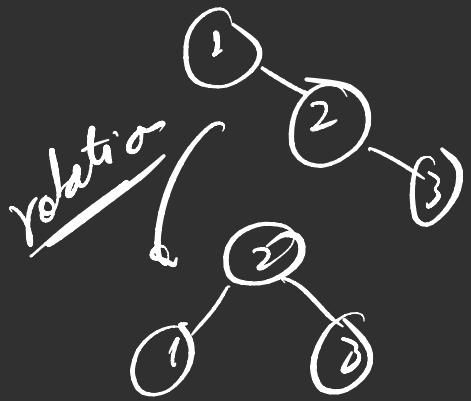
1. Validate Binary Search Tree

Intuition

Let’s implement

2. Insert Node to a BST

1 2 3 4 5 6 7 8 9 10 11



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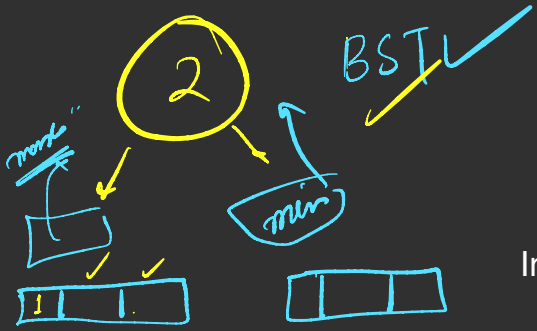

Intuition

Let’s implement

3. BST to Greater Sum Tree

Intuition

Let’s implement

4. LCA of 2 nodes in a BST

Intuition

Let’s implement

Thank You!

Reminder: Going to the gym & observing the trainer work out can help you know the right technique, but you'll muscle up only if you lift some weights yourself.

So, PRACTICE, PRACTICE, PRACTICE!