

AVL Trees

PAW

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Now that you've had an introduction to AVL trees, let's take a step back and look at where this operation called rotation even comes from.

The Canonical Trees

Let's start by taking the numbers 1,2,3 and creating every possible valid binary search tree from these three numbers.

Draw your search trees in the space below.

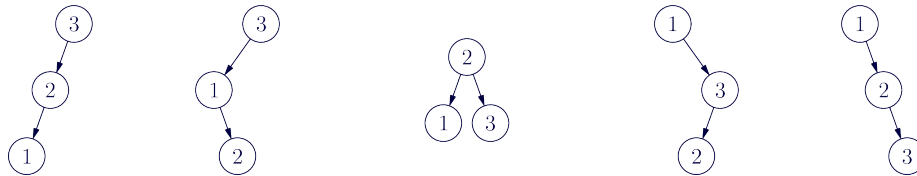


Figure 1: Five Trees

These are the five possible arrangements of 1, 2, and 3 in a BST.

Code Examples

```
Node leftRotate(Node one) {  
    // TODO: Implement left rotation  
}  
  
Node leftRotate(Node one) {  
    Node two = one.right;  
    one.right = two.left;  
    two.left = one;  
    return two;  
}
```