

⑧ Trim BST: Remove all nodes that are outside the range $[min, max]$

```
Node trimBST (Node root, int min, int max) {
    if (root == null) return null;
    if (root.val < min)
        root = trimBST (root.right, min, max);
    if (root.val > max)
        root = trimBST (root.left, min, max);
    return root;
}
```

Algo:

Begin with root = n ($n = \text{root}$)
if ($n.\text{val} < \text{min}$) return $n.\text{right}$;
if ($n.\text{val} > \text{max}$) return $n.\text{left}$;
Repeat for $n.\text{left}$ and $n.\text{right}$.

Algo:

if ($n < \text{min}$)
 $n = \text{trim}(n.\text{right}, \text{min}, \text{max})$
if ($n > \text{max}$)
 $n = \text{trim}(n.\text{left}, \text{min}, \text{max})$
return n ;