

Given a Binary Search Tree (BST) and a range l-h(inclusive), count the number of nodes in the BST that lie in the given range.

- The values smaller than root go to the left side
- The values greater and equal to the root go to the right side

**Example 1:**

Input:

```
    10
   /  \
  5    50
 /  /  \
1  40 100
```

l = 5, h = 45 Output: 3

Explanation: 5 10 40 are the node in the range

**Example 2:**

Input:

```
    5
   /  \
  4    6
 /      \
3        7
```

l = 2, h = 8 Output: 5

Explanation: All the nodes are in the given range.

**Your Task:**

This is a function problem. You don't have to take input. You are required to complete the function `getCountOfNode()` that takes root, l ,h as parameters and returns the count.

Expected Time Complexity:  $O(N)$

Expected Auxiliary Space:  $O(\text{Height of the BST})$ .

Constraints:

$1 \leq \text{Number of nodes} \leq 100$

$1 \leq l < h < 103$

## Solution:

```
class Solution
```

```
{
```

```
    public void getinorder(int[] arr, Node root, int l, int h){
```

```
        if(root == null){
```

```
            return;
```

```
        }
```

```
        getinorder(arr, root.left, l, h);
```

```
        if(root.data >= l && root.data <= h){
```

```
            arr[0]++;
```

```
        }
```

```
        getinorder(arr, root.right, l, h); // Change root.left to root.right here
```

```
    }
```

```
    int getCount(Node root, int l, int h)
```

```
    {
```

```
        int[] arr=new int[1];
```

```
        getinorder(arr, root, l, h);
```

```
        return arr[0];
```

```
    }
```

```
}
```

