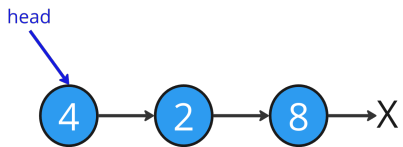
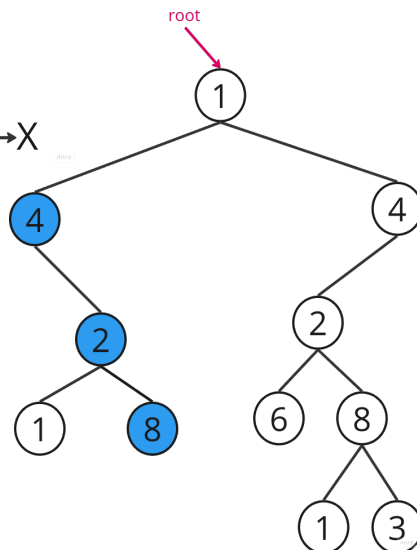


The given linked list



The given binary tree



```

class Solution {
public:
    bool dfs(TreeNode*& root, ListNode* head, ListNode* cur){
        if(!cur) return true;
        if(!root) return false;

        if(root->val==cur->val) cur=cur->next;
        else if(root->val==head->val) head=head->next;
        else cur=head;

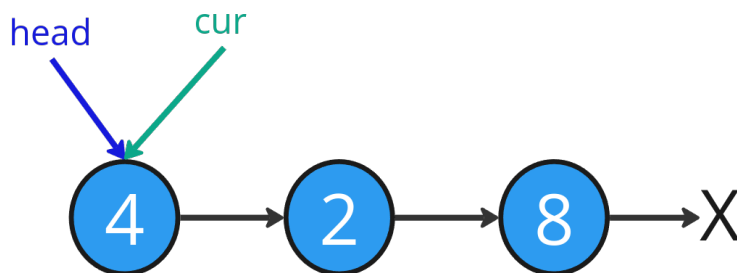
        return dfs(root->left,head,cur) || dfs(root->right,head,cur);
    }
}
  
```

```

bool isSubPath(ListNode* head, TreeNode* root) {
    return dfs(root,head,head);
}
  
```

1.

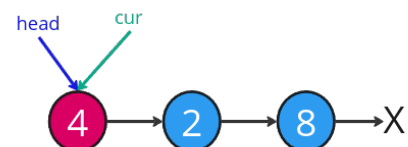
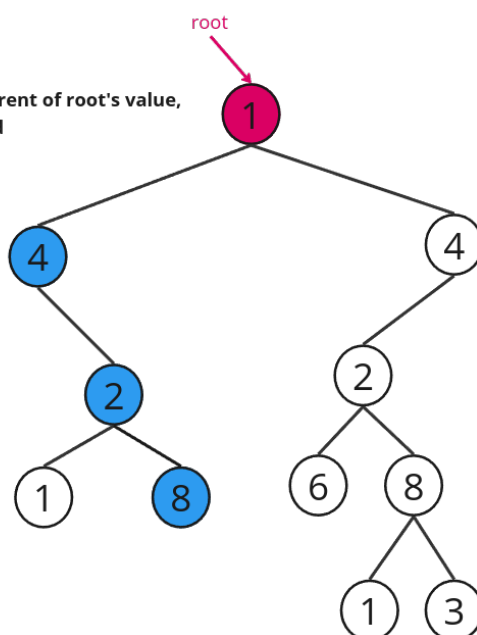
**Create a new pointer **cur** to the head of the linked list:**



miro

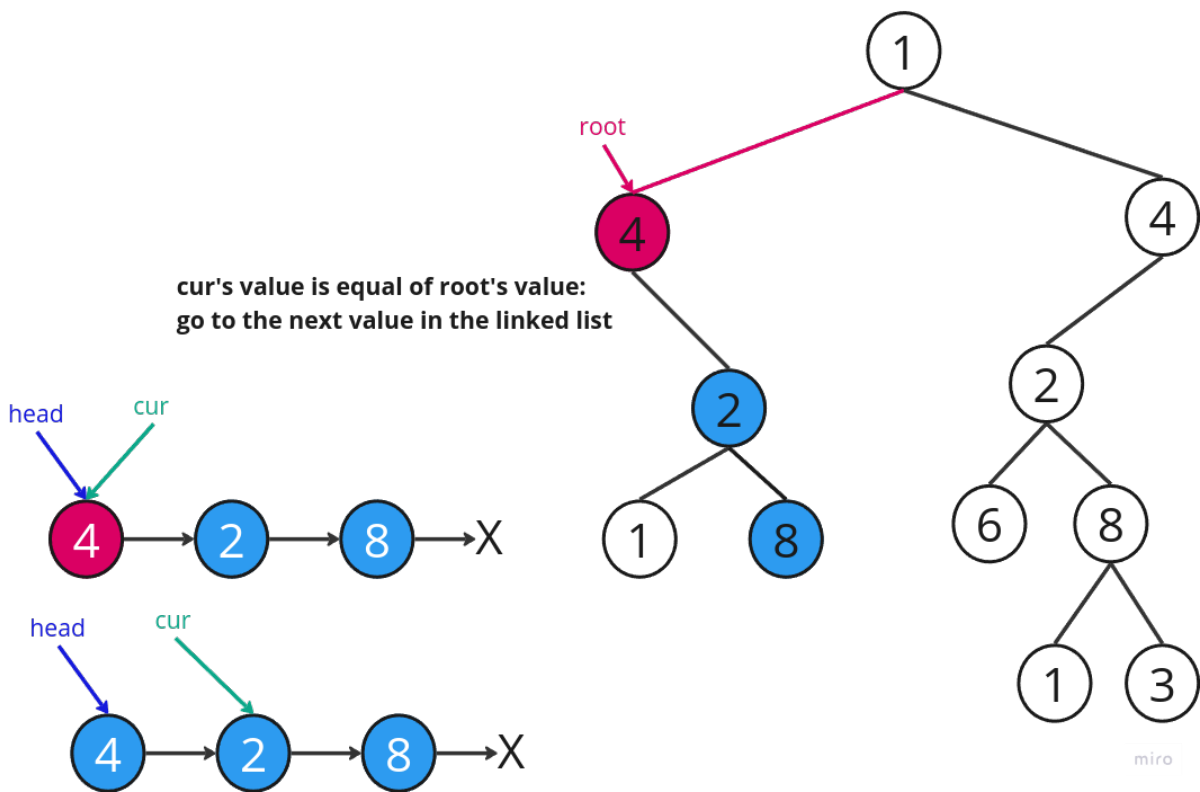
**DFS:**

cur's value is different of root's value,  
same for the head

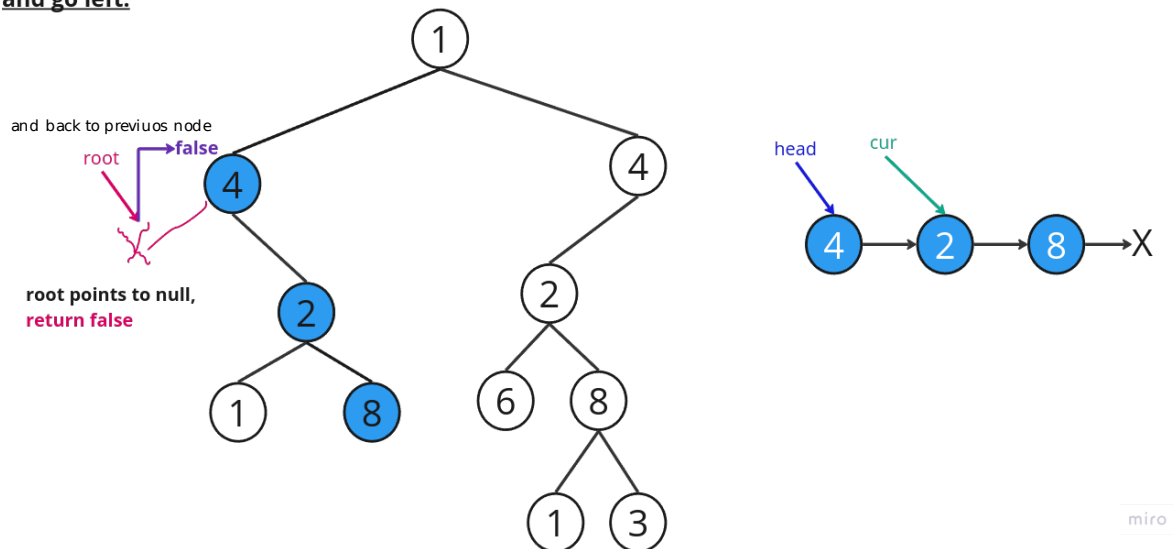


miro

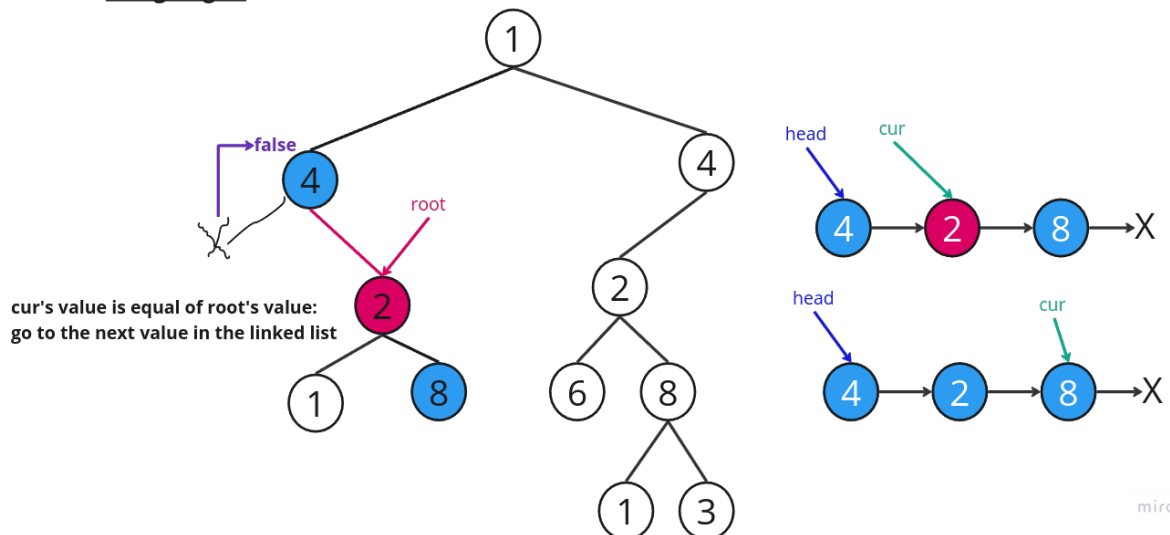
so, go left:



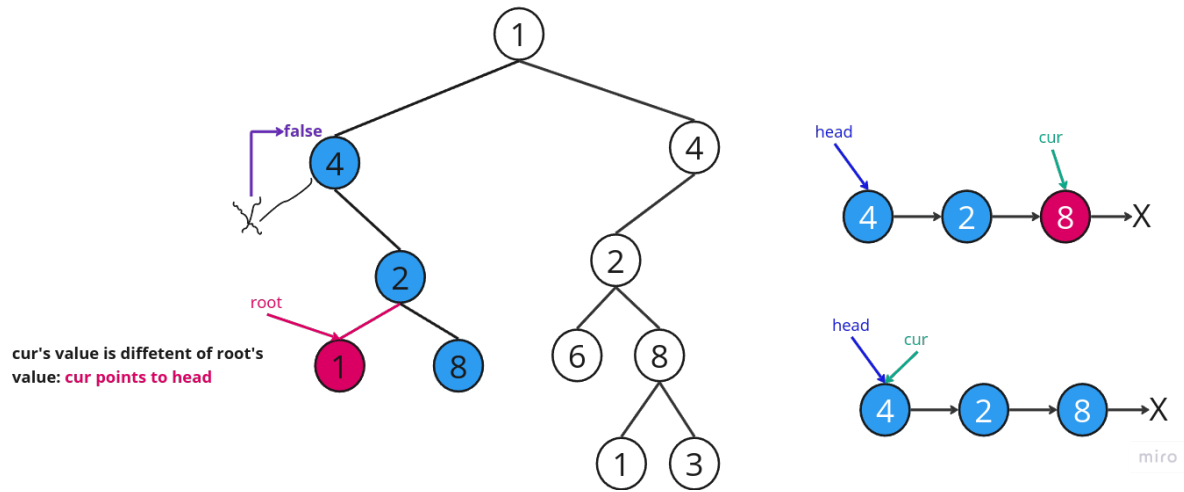
and go left:



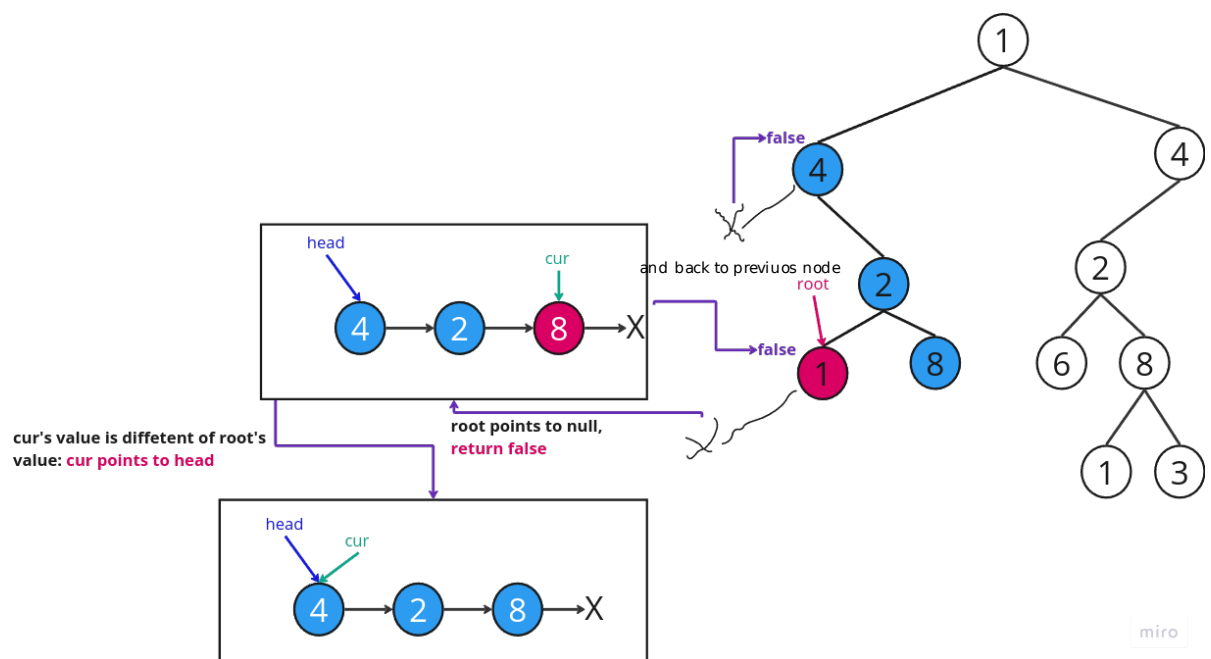
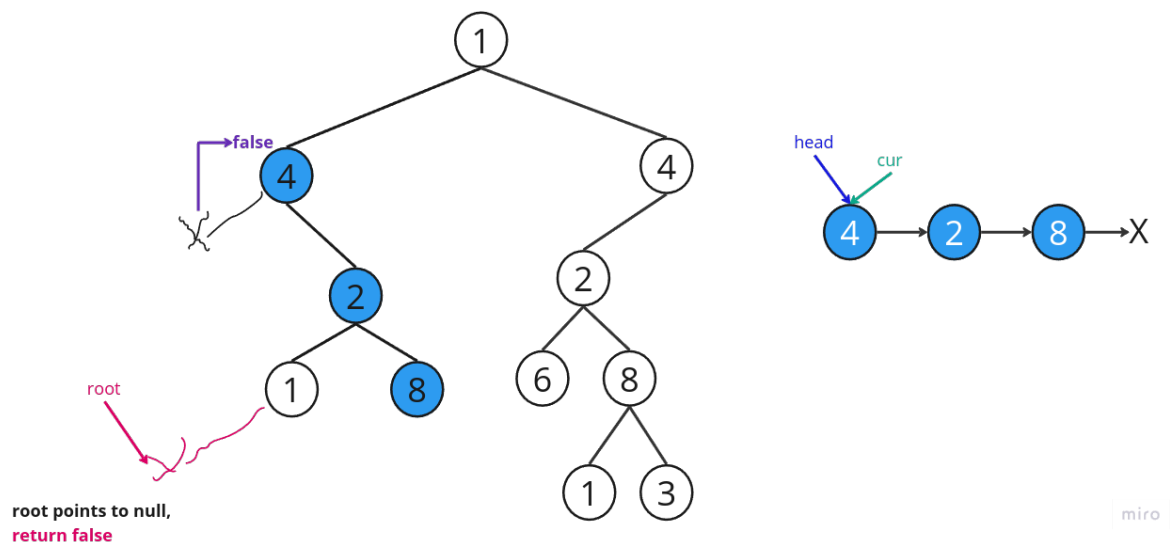
and go right:



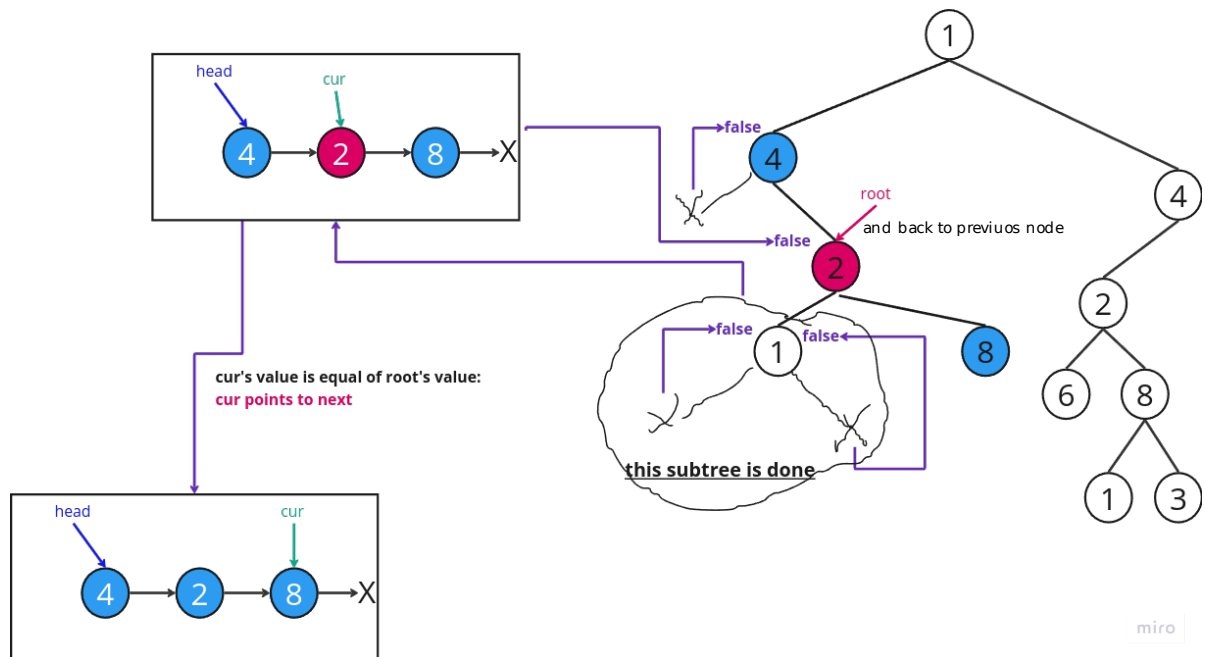
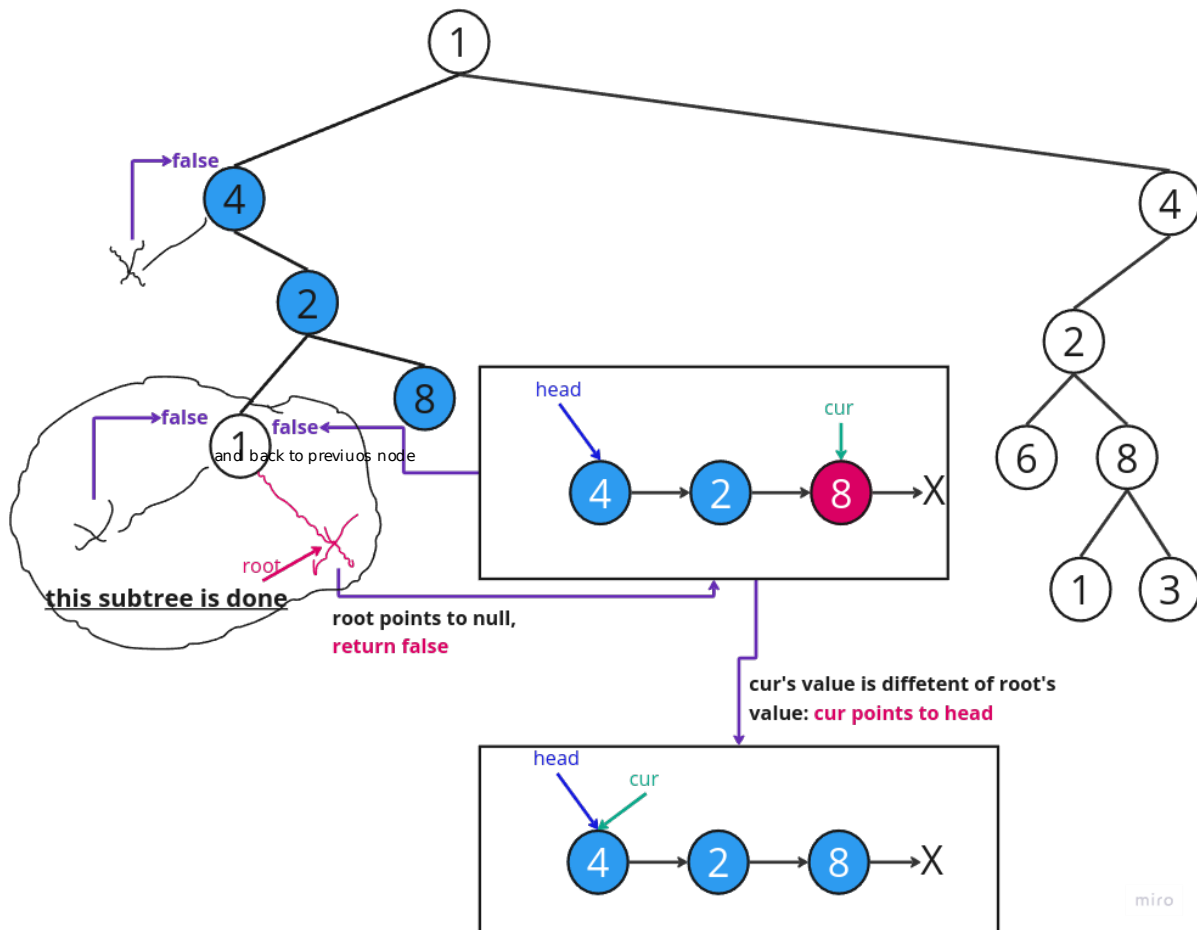
and go left:



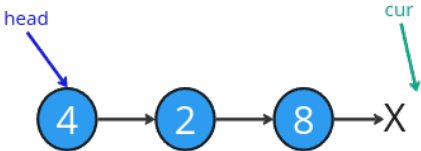
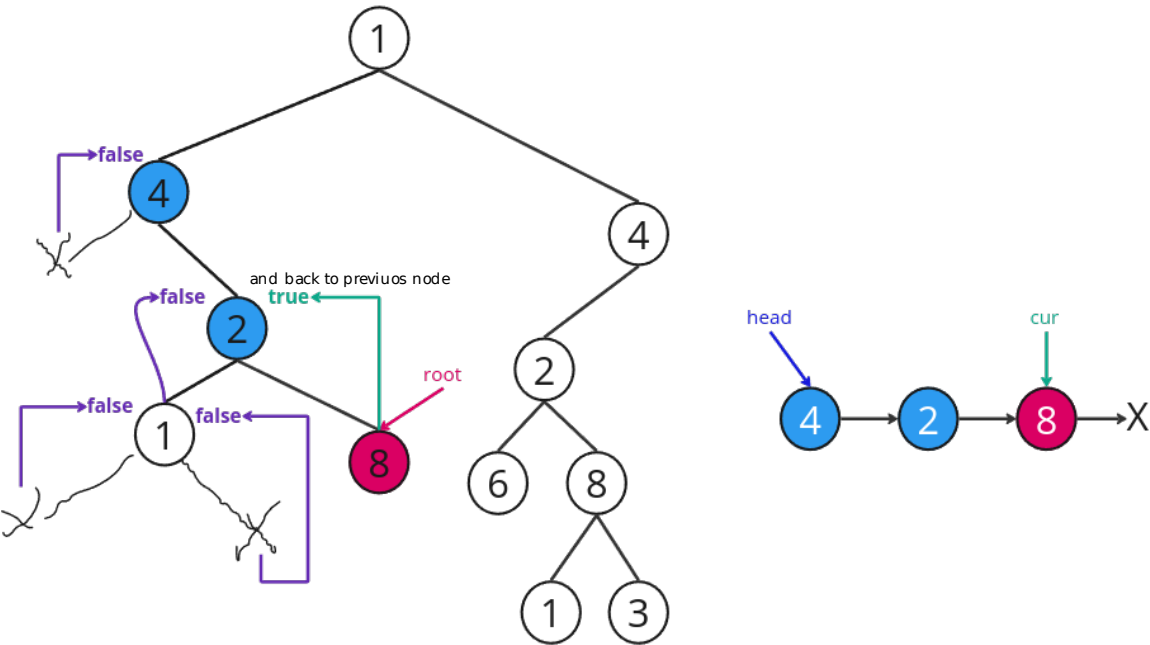
and go left:



and go right:

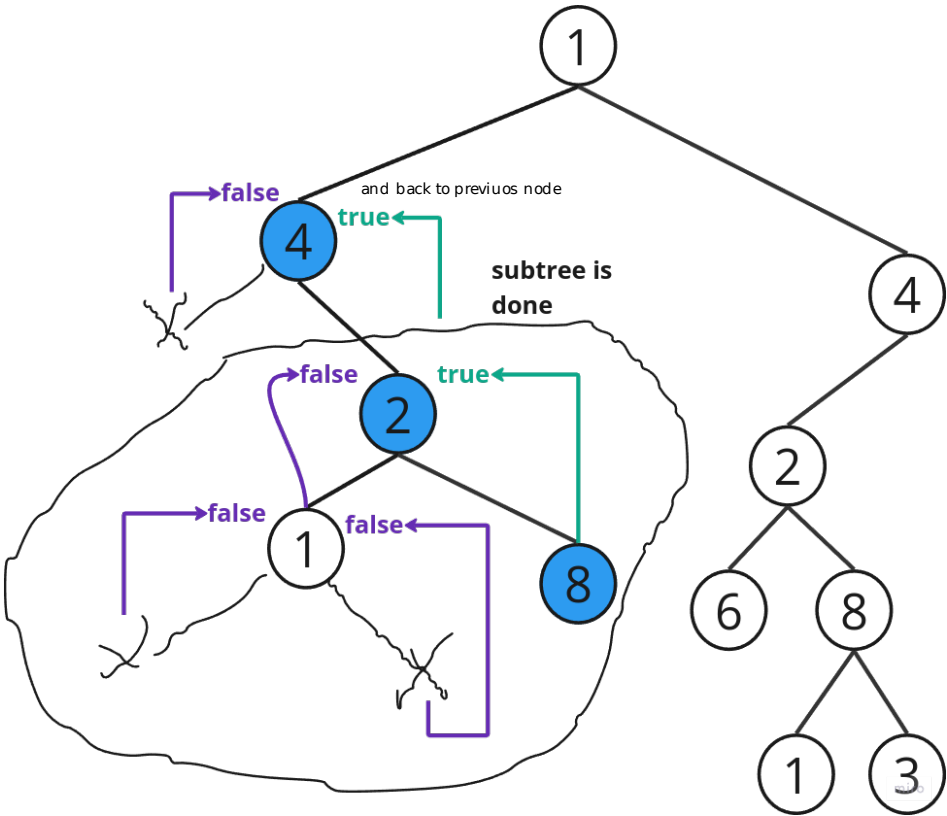


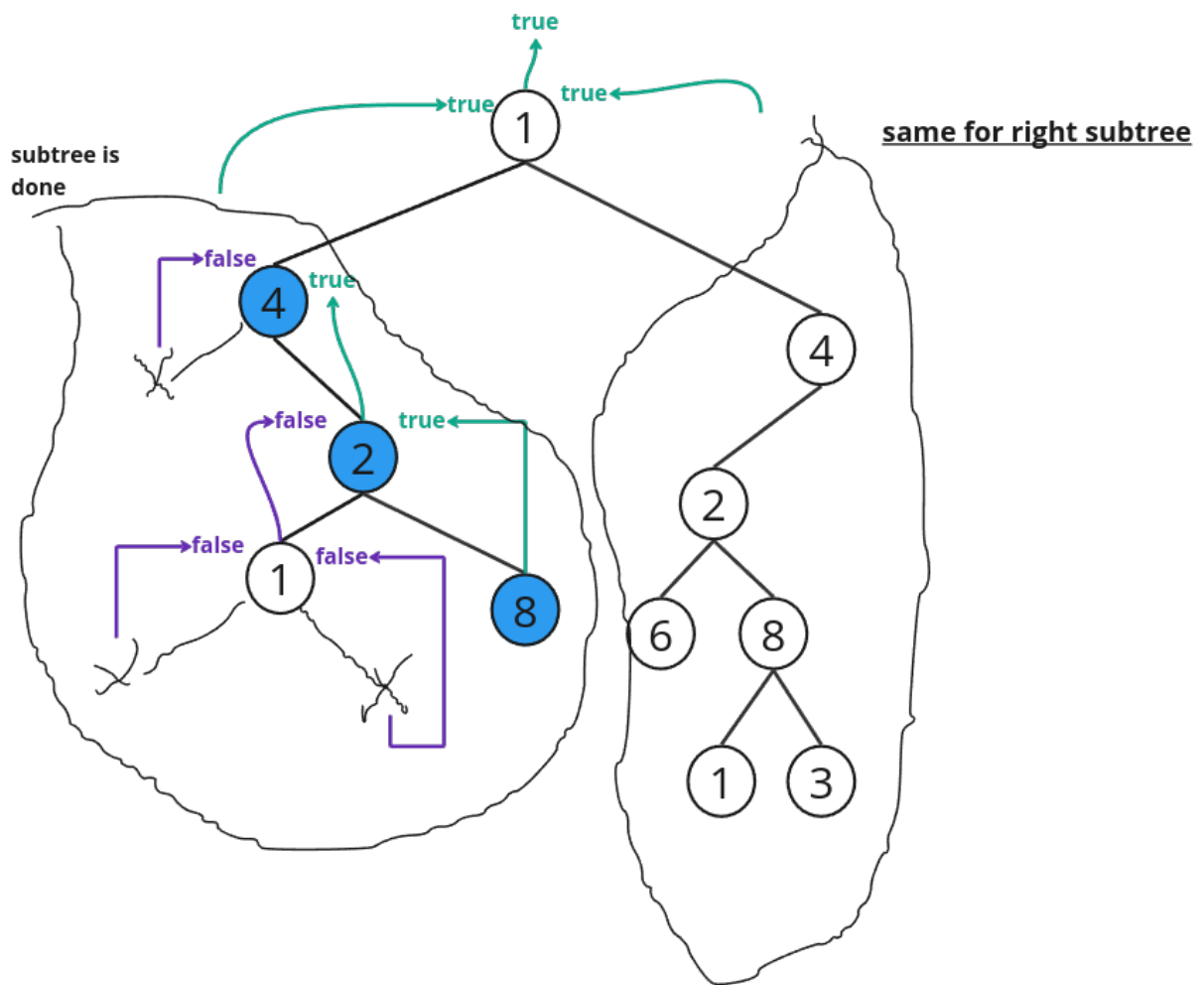
and go right:



cur points to null: return true and back to previous node

miro





<u>true</u>	<u>or</u>	<u>true</u>	→	<u>true</u>
<u>true</u>	<u>or</u>	<u>false</u>	→	<u>true</u>
<u>false</u>	<u>or</u>	<u>true</u>	→	<u>true</u>
<u>false</u>	<u>or</u>	<u>false</u>	→	<u>false</u>

miro