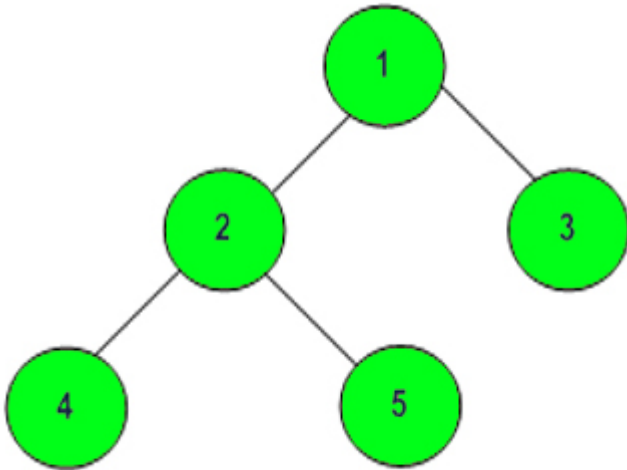


# Kth Ancestor in a Tree

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Given a binary tree of size **N**, a **node** and a positive integer **k**., Your task is to complete the function **kthAncestor()**, the function should return the **kth** ancestor of the given node in the binary tree. If there does not exist any such ancestor then return -1.



## Input:

K = 2

Node = 4

**Output:** 1

## Explanation:

Since, K is 2 and node is 4, so we first need to locate the node and look k times its ancestors.

Here in this Case node 4 has 1 as his 2nd Ancestor aka the Root of the tree.

## Input:

k=1

node=3

1

/

2 3

## Output:

1

**Explanation:** K=1 and node=3 ,Kth ancestor of node 3 is 1.

```

def kthAncestor(root,k, node):
    #code here
    res = {}
    helper(root,res, None)
    parent = None
    for key in res:
        if key.data == node:
            node = key
            break
    while node:
        node = res[node]
        k = k-1
        if k==0 and node!=None:
            return node.data
    return node if node else -1

```

```

def helper(root,res,parent):
    if root is None:
        return
    res[root] = parent
    helper(root.left,res,root)
    helper(root.right,res,root)

```