

Return Binary In-order Traversal

Question: Given a binary tree, return the inorder traversal of its nodes' values.

For example:

Given binary tree {1,2,3},

1

\

2

/

3

return [1,3,2].

Solutions:

```
class TreeNode:
```

```
    def __init__(self, x):
```

```
        self.val = x
```

```
        self.left = None
```

```
        self.right = None
```

```
class Solution:
```

```
    def inorderTraversal(root):
```

```
        stack = []
```

```
        node = root
```

```
        solution = []
```

```
        while node!= None or len(stack)>0:
```

```
            if node != None:
```

```
                stack.append(node)
```

```
                node = node.left
```

```
            else:
```

```
                node = stack.pop()
```

```
                solution.append(node.val)
```

```
                node = node.right
```

```
        return solution
```

```
if __name__ == '__main__':
```

```
    BT, BT.right, BT.right.left = TreeNode(1), TreeNode(2), TreeNode(3)
```

```
    print ( Solution.inorderTraversal(BT) )
```