

**Problem 1:** Level order traversal of a binary tree. Given the root node of the tree and you have to print the value of the level of the node by level.

```
class TreeNode:
```

```
    def __init__(self, val=0, left=None, right=None):
```

```
        self.val = val
```

```
        self.left = left
```

```
        self.right = right
```

```
def levelOrder(root):
```

```
    if not root:
```

```
        return []
```

```
    result = []
```

```
    queue = [root]
```

```
    while queue:
```

```
        level = []
```

```
        level_size = len(queue)
```

```
        for _ in range(level_size):
```

```
            node = queue.pop(0)
```

```
            level.append(node.val)
```

```
            if node.left:
```

```
                queue.append(node.left)
```

```
            if node.right:
```

```
                queue.append(node.right)
```

```
    result.append(level)
```

```
return result
```

```
root = TreeNode(1)
```

```
root.left = TreeNode(2)
```

```
root.right = TreeNode(3)
```

```
root.left.left = TreeNode(4)
```

```
root.left.right = TreeNode(5)
```

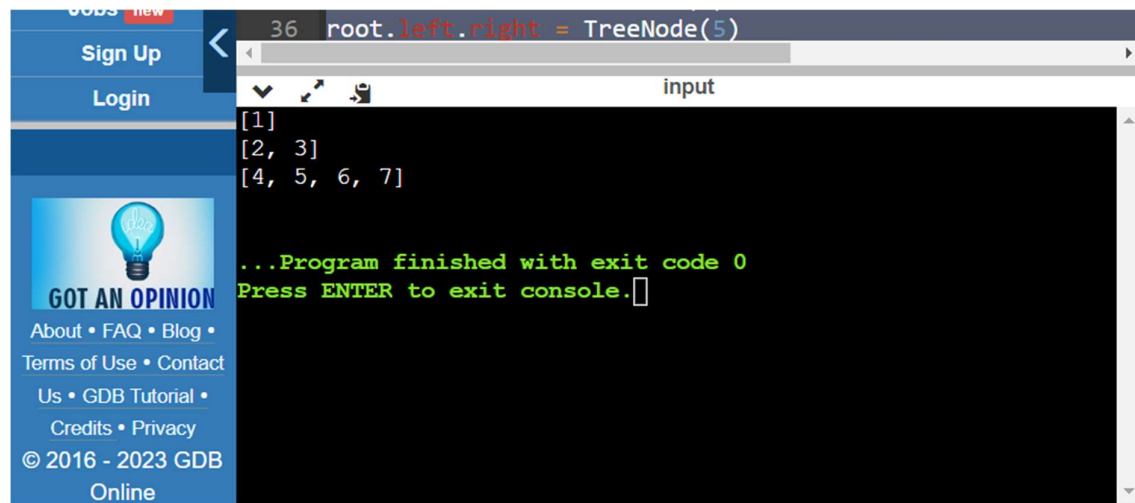
```
root.right.left = TreeNode(6)
```

```
root.right.right = TreeNode(7)
```

```
result = levelOrder(root)
```

```
for level in result:
```

```
    print(level)
```



The screenshot shows a web browser window. On the left is a sidebar with a blue header containing 'Sign Up' and 'Login' buttons. Below this is a section titled 'GOT AN OPINION' with a lightbulb icon, followed by links for 'About', 'FAQ', 'Blog', 'Terms of Use', 'Contact Us', 'GDB Tutorial', 'Credits', and 'Privacy'. At the bottom of the sidebar is the copyright notice '© 2016 - 2023 GDB Online'. The main content area of the browser shows a terminal window with a dark background. The terminal title is 'input'. It displays the output of a program: '[1]', '[2, 3]', and '[4, 5, 6, 7]'. Below the output, it says '...Program finished with exit code 0' and 'Press ENTER to exit console.' with a cursor. The browser's address bar shows the URL '36 root.left.right = TreeNode(5)'.