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Compiling...
Running the tests....
1. Generate Binary Search Tree from file
2. Add Node
3. Remove Node
4. Search Node
5. Print Binary Search Tree
6. Print Node Count
7. Print Max Depth
8. Print Leaf Node Count
9. Exit
Enter filename: input.txt
1. Generate Binary Search Tree from file
2. Add Node
3. Remove Node
4. Search Node
5. Print Binary Search Tree
6. Print Node Count
7. Print Max Depth
8. Print Leaf Node Count
9. Exit
> 5
0 -> Print inorder
1 -> Print preorder
1.000000 2.000000 4.000000 5.000000 7.000000 8.000000 9.000000
```

- 1. Generate Binary Search Tree from file 2. Add Node 3. Remove Node 4. Search Node 5. Print Binary Search Tree 6. Print Node Count 7. Print Max Depth 8. Print Leaf Node Count 9. Exit > 2 Enter value: 10 1. Generate Binary Search Tree from file 2. Add Node Remove Node 4. Search Node 5. Print Binary Search Tree 6. Print Node Count 7. Print Max Depth 8. Print Leaf Node Count 9. Exit > 5 0 -> Print inorder
- 5.000000 2.000000 1.000000 4.000000 8.000000 7.000000 9.000000 10.000000

1 -> Print preorder

3. Remove Node 4. Search Node 5. Print Binary Search Tree 6. Print Node Count 7. Print Max Depth 8. Print Leaf Node Count 9. Exit > 3 Enter value: 9 1. Generate Binary Search Tree from file 2. Add Node 3. Remove Node 4. Search Node 5. Print Binary Search Tree 6. Print Node Count 7. Print Max Depth 8. Print Leaf Node Count 9. Exit > 5 0 -> Print inorder 1 -> Print preorder 1.000000 2.000000 4.000000 5.000000 7.000000 8.000000 10.000000

1. Generate Binary Search Tree from file

2. Add Node

- 1. Generate Binary Search Tree from file 2. Add Node 3. Remove Node 4. Search Node 5. Print Binary Search Tree 6. Print Node Count 7. Print Max Depth 8. Print Leaf Node Count 9. Exit > 4 Enter value: 7 1. Generate Binary Search Tree from file
- Node with value 7.000000 found at adress 0x55eb75bd4d80.
- 2. Add Node
- 3. Remove Node
- 4. Search Node
- 5. Print Binary Search Tree
- 6. Print Node Count
- 7. Print Max Depth
- 8. Print Leaf Node Count
- 9. Exit

> 6

Number of Nodes in Binary Search Tree: 7

- Generate Binary Search Tree from file
   Add Node
   Remove Node
   Search Node
- 5. Print Binary Search Tree6. Print Node Count
- 7. Print Max Depth
- 8. Print Leaf Node Count
- 9. Exit > 7
- Depth of Binary Search Tree: 3
- Generate Binary Search Tree from file
   Add Node
- 3. Remove Node
- 4. Search Node
- 5. Print Binary Search Tree
- 6. Print Node Count
- 7. Print Max Depth
- 8. Print Leaf Node Count
- 9. Exit

> 8

Number of Leaf Nodes in Binary Search Tree: 4

```
2. Add Node
3. Remove Node
4. Search Node
5. Print Binary Search Tree
6. Print Node Count
7. Print Max Depth
8. Print Leaf Node Count
9. Exit
> 9
Terminating Program...
```

Completed tests....

osmancan@osmancan-VirtualBox:~/Desktop/220104004011\$

1. Generate Binary Search Tree from file