Name : Ritik Mandloi PLL Assignment IV

Roll No: **180101066** Readme

INSTRUCTIONS FOR EXECUTION:

A) 180101066_partA.hs

- 1. Open terminal inside the 180101066_AssignIV folder.
- 2. Type: bash test a.sh

You can try the 10 test cases (commented) in the 180101066 partA.hs file.

B) 180101066_partB.hs

- 1. Open terminal inside the 180101066_AssignIV folder.
- 2. Type: bash test_b.sh

I have provided 10 test cases (commented) in the 180101066 partB.hs file.

You can uncomment all the test cases and run again using the above instructions.

C) 180101066_partC.hs

- 1. Open terminal inside the 180101066_AssignIV folder.
- 2. Type: bash test_c.sh

I have provided 10 test cases (commented) in the 180101066 partC.hs file.

You can uncomment all the test cases and run again using the above instructions.

I have provided the screenshots for better understanding of execution.

```
mandloi@mandloi-VirtualBox:~/Desktop/180101066_AssignIV$ bash test_a.sh
Enter a list of numbers enclosed in [] and ',' seperated.
Example: [1,2,3,4]
[1,2,3,4,5,6,7,8,9,10]
You Entered The List: [1,2,3,4,5,6,7,8,9,10]
mandloi@mandloi-VirtualBox:~/Desktop/180101066_AssignIV$
```

Screenshot of the commented test-cases.

```
nandloi@mandloi-VirtualBox:~/Desktop/180101066_AssignIV$ bash test_c.sh
 [1 of 1] Compiling Main
                                                                                                                      ( 180101066_partC.hs, 180101066_partC.o )
Linking 180101066_partC ...
 Enter a list of numbers enclosed in [] and ',' seperated.
Example: [1,2,3,4]
[1,2,3,4,5,6,7,8,9,10]
You Entered The List:: [1,2,3,4,5,6,7,8,9,10]
Generated BST :: Node Nil 1 (Node Nil 2 (Node Nil 3 (Node Nil 4 (Node Nil 5 (Node Nil 6 (Node Nil 7
PreOrder Traversal :: 1 2 3 4 5 6 7 8 9 10
InOrder Traversal :: 1 2 3 4 5 6 7 8 9 10
PostOrder Traversal :: 10 9 8 7 6 5 4 3 2 1
You Entered The List:: [1,2,3,4,5,6,7,8]
Generated BST :: Node Nil 1 (Node Nil 2 (Node Nil 3 (Node Nil 4 (Node Nil 5 (Node Nil 6 (Node Nil 7
PreOrder Traversal :: 1 2 3 4 5 6 7 8
InOrder Traversal :: 1 2 3 4 5 6 7 8 PostOrder Traversal :: 8 7 6 5 4 3 2 1
You Entered The List:: [8,7,6,5,4,3,2,1,0,-1,-2,-3]
Generated BST :: Node (Node (Nod
 7 Nil) 8 Nil
PreOrder Traversal :: 8 7 6 5 4 3 2 1 0 -1 -2 -3
InOrder Traversal :: -3 -2 -1 0 1 2 3 4 5 6 7 8
InOrder Traversal :: -3 -2 -1 0 1 2 3 4 5 6 7 8
PostOrder Traversal :: -3 -2 -1 0 1 2 3 4 5 6 7 8
You Entered The List:: [50,0,100,25,75,-25,90,40,60,30,70,15,85,20,80,10]
Generated BST :: Node (Node (Node Nil (-25) Nil) 0 (Node (Node (Node Nil 10 Nil) 15 (Node Nil 20 Nil
de Nil 70 Nil)) 75 (Node (Node (Node Nil 80 Nil) 85 Nil) 90 Nil)) 100 Nil)
PreOrder Traversal :: 50 0 -25 25 15 10 20 40 30 100 75 60 70 90 85 80 InOrder Traversal :: -25 0 10 15 20 25 30 40 50 60 70 75 80 85 90 100 PostOrder Traversal :: -25 10 20 15 30 40 25 0 70 60 80 85 90 75 100 50
You Entered The List:: [1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10]
Generated BST :: Node Nil 1 (Node Nil 2 (Node Nil 3 (Node Nil 4 (Node Nil 5 (Node Nil 6 (Node Nil 7
PreOrder Traversal :: 1 2 3 4 5 6 7 8 9 10
InOrder Traversal :: 1 2 3 4 5 6 7 8 9 10
PostOrder Traversal :: 10 9 8 7 6 5 4 3 2 1
```