

DATA STRUCTURE AND PROGRAM DESIGN LAB – 06

6. Implement Binary search tree(BST) with following Menu operations.

1. Search an element in BST(Display NULL if not found, If found Display Found)
2. Insert an element in BST
3. Delete leaf element in BST
4. Exit

SAMPLE OUTPUT:

```
Practical-6.c          PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS
output.docx
output.docx
output.docx
output.docx
al-1A.c
al-1B.c
al-1C.c
al-2.c
al-3.c
al-4.c
al-5.c
al-6.c
Tools found in
it 'Practical-
PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB> gcc Practical-6.c
PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB> ./a.exe

        Binary Search Tree Menu
1. Insert an element
2. Search an element
3. Delete leaf element
4. Exit
Enter your choice: 1
Enter element to insert: 3
Inorder traversal: 3

        Binary Search Tree Menu
1. Insert an element
2. Search an element
3. Delete leaf element
4. Exit
Enter your choice: 1
Enter element to insert: 4
Inorder traversal: 3 4

        Binary Search Tree Menu
1. Insert an element
2. Search an element
3. Delete leaf element
4. Exit
Enter your choice: 1
Enter element to insert: 6
Inorder traversal: 3 4 6

        Binary Search Tree Menu
1. Insert an element
```

```
practical-4.c    73 int main() {  
practical-6.c      PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS  
  
                                Binary Search Tree Menu  
                                1. Insert an element  
                                2. Search an element  
                                3. Delete leaf element  
                                4. Exit  
Enter your choice: 2  
Enter element to search: 4  
Found  
  
                                Binary Search Tree Menu  
                                1. Insert an element  
                                2. Search an element  
                                3. Delete leaf element  
                                4. Exit  
Enter your choice: 3  
Enter leaf element to delete: 2  
Inorder traversal: 3 4 6  
  
                                Binary Search Tree Menu  
                                1. Insert an element  
                                2. Search an element  
                                3. Delete leaf element  
                                4. Exit  
Enter your choice: 3  
Enter leaf element to delete: 6  
Leaf node deleted.  
Inorder traversal: 3 4  
  
                                Binary Search Tree Menu  
                                1. Insert an element  
                                2. Search an element
```

```
1. Insert an element  
2. Search an element  
3. Delete leaf element  
4. Exit  
Enter your choice: 4  
PS C:\Users\Ankush\OneDrive\Desktop\DSPD-LAB>
```