

2. AVL TREE

- a. Into empty AVL Tree:
 - i. (Bobot 10%, SO 2, LOj 2.2, LO 3) Insert the following values: 6, 27, 19, 11, 36, 14, 81, 63, 75
 - ii. (Bobot 10%, SO 2, LOj 2.2, LO 3) Delete the following values: 14, 75, 36, 19, 11
- b. (Bobot 50%, SO 2, LOj 2.2, LO 3) Write a program to insert, delete and print datas from AVL Tree insertion in C Program

```
1. Insertion
2. Deletion
3. Traversal
4. Exit
Choose:
```

- i. Insertion

In this menu, the program will asked the value that the user want to insert into AVL tree. Do the insertion in (a).

```
1. Insertion
2. Deletion
3. Traversal
4. Exit
Choose: 1
Insert: 6
```

- ii. Deletion

In this menu, the program will asked the value that the user want to delete from AVL tree. If the value is found in the tree, than it will be deleted otherwise the program gives message 'data not found'. Do the deletion in (a).

```
1. Insertion
2. Deletion
3. Traversal
4. Exit
Choose: 2
Delete: 14
Data Found
Value 14 was deleted
```

```
1. Insertion
2. Deletion
3. Traversal
4. Exit
Choose: 2
Delete: 7
Data not found
```

- iii. Traversal

In this menu, the program will print all datas from AVL tree in preorder, inorder and postorder

```
1. Insertion
2. Deletion
3. Traversal
4. Exit
Choose: 3
Preorder: 19 11 6 14 36 27 75 63 81
Inorder: 11 6 14 19 36 27 75 63 81
Postorder: 11 6 14 36 27 75 63 81 19
```

- iv. Exit

```
1. Insertion
2. Deletion
3. Traversal
```