# **Function Used in Project**

- > Two classes i.e. *Train\_Sys* and *Avl\_tree*.
  - o *Train\_Sys* uses linked list
  - o *Avl\_tree* uses AVL

# 1. Option:

Used for selection options.

#### 2. Insert:

Inserting essential data i.e. name, CNIC, gender through link list.

## 3. tkt\_book:

it stores Customer data i.e. ticket id, CNIC, gender, destination through link list.

#### 4. Print:

It prints out the data stored in *insert* function.

## 5. print tkt:

It prints out the data stored in **tkt\_book** function.

## 6. del\_person:

it deletes the Customer data.

# 7. getLength:

Return current Length of List.

#### 8. getHead:

Returns Head of *Train\_Sys* List.

#### 9. movePersonToNode:

function recieves complete *Train\_Sys* List and the complete avl tree and moves data from *train\_sys* to *avl\_tree*.

#### 10.dltPersonToNode:

function recieves complete *Train\_Sys* List and the complete avl tree and delete data from *avl\_tree*.

# avl\_tree Functions.

#### 11. Insert:

This function takes two arguments first argument is of type **node** and the second argument is of type **Person**. Then it recieves **ticket\_id** from node called **Person** and store the incoming data from link list into AVL.

#### 12. Del:

This function takes two arguments first argument is of type **node** and the second argument is of type **Person**. Then it recieves **ticket\_id** from node called **Person** and delete the nodes of link list from AVL.

# 13. Print:

Display complete data of Customers coming from Link list to AVL.