

problem1

Write a C program to implement various operations of a Binary tree such as Insert, Search, Display (you can use the inorder traversal for the display) and Deleting a specified key.

Use the below logic for the insertion:

```
if (count%2==0)
r->LEFT = insert(r->LEFT, n);
else
r->RIGHT = insert(r->RIGHT, n);
```

where *count* is the variable keeping track of the items in the binary tree

problem2

Write a C program to implement various traversals of a Binary tree such as Inorder, postorder and preorder traversals.

problem3

Given a singly linked list with an even number of elements, write a C program swap every two adjacent nodes and print the resultant linked list.

problem4

Given a doubly linked list, write a C program to sort the elements in ascending and descending order and print the same.