**Questions on Binary Tree :**

1. Print the left view of a binary tree.

2.Print the deepest right leaf node of a binary tree

3. print the tree in a spiral form (given is the pointer to the root node)

1

2 3

4 5 6 7

op:

1

3 2

4 5 6 7

first try with the simple logic O(n^2) where n is the number of nodes in the given tree.

then try to optimize it to do it in O(n).

**Questions on Linked List :**

4. Add the two numbers represented by two linked lists respectively input : the heads of the both the linked list handle all the edge cases

e.g. 1->2->3->4->null

5->6->7->null

4321

+ 765

-----

5086

output : 6->8->0->5->null

5.Given a pointer to a node of the linked list, delete that node.

input : pointer to the node to be deleted

1->2->3->4->null

lets say pointer to 2 was given

output : 1->3->4->null

6. Given an array of integers, find the maximum sum of a contiguous subarray(not subsequence)

input : [-2, -3, 4, -1, -2, 1, 5, -3]

--> 4 + (-1) + (-2) + 1 + 5

output : 7

Input: [3, 2, 6, 4, 5, 1]

--->[3, 4, 5]

ouput : 12

**Questions on Subsequence & Subarray :**

7. Maximum sum increasing subsequence

subsequence - 'xoriantsystems' -- 'xoatysts' is a subsequence of the parent string (need not to be contiguous)

return the sum of the maximum sum increasing subsequence such that the integers in the subsequence are sorted non-decreasing order.

Input: length of the array, array elements

Input: [1, 104, 2, 3, 100, 4, 6]

--> [1, 2, 3 ,100]

Output: 106

8.Given two strings of length m and n respectively find the length of longest

common subsequence

input : xoriantsolutions , xorandornot

--> xoranot

ouput : 7

**Other:**

9.You are given only 5 zeros, apply any mathematical operator(s) any number of times make the result 120