ASSIGNMENT

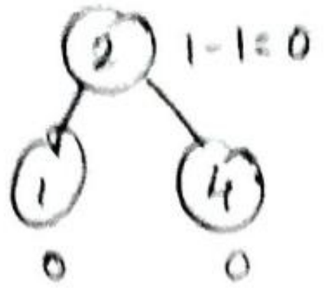
Name : k. Pavithra

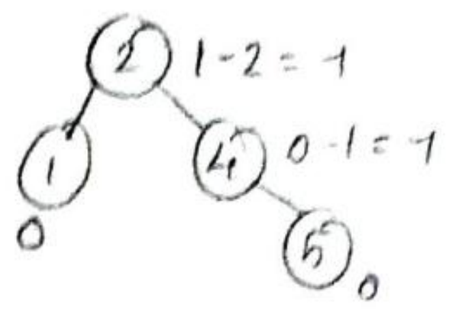
Roll No : 15CSR129

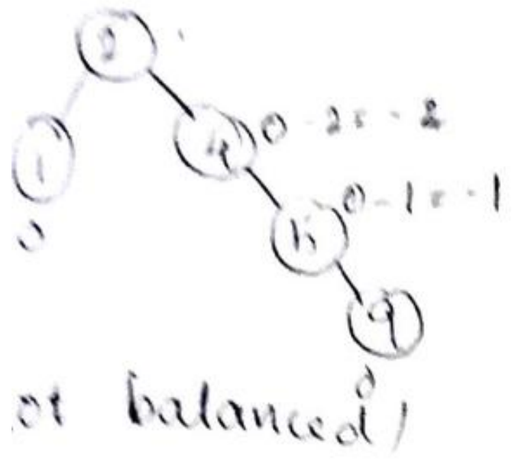
Subject : Data Structure

Date : 27-12-16.

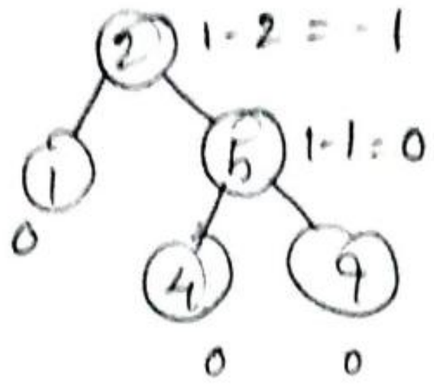
ent 2, 1, 4, 5, 9, 3, 6, 7 into an initially empty tree.

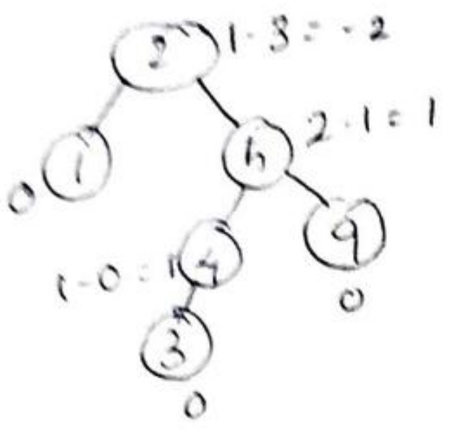


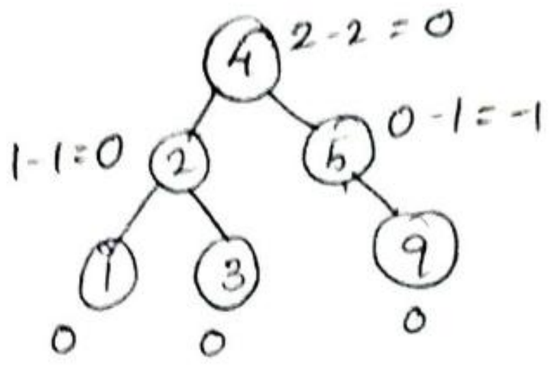


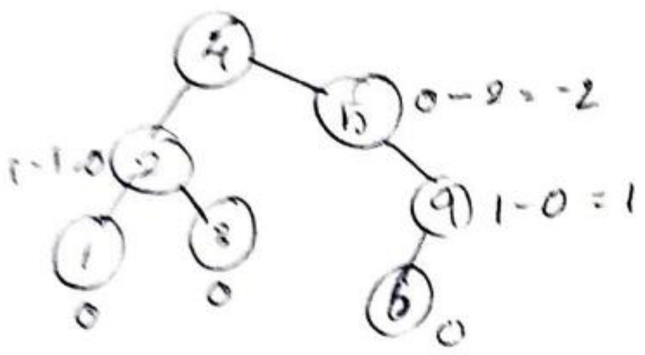


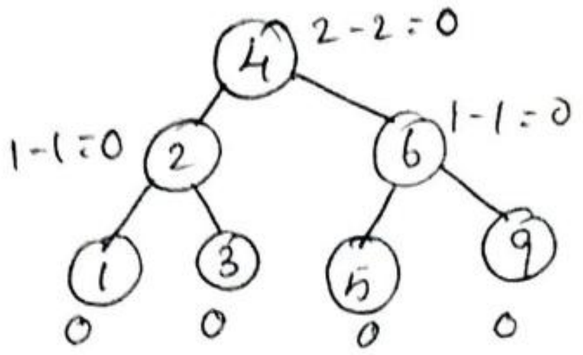
ot balanced)



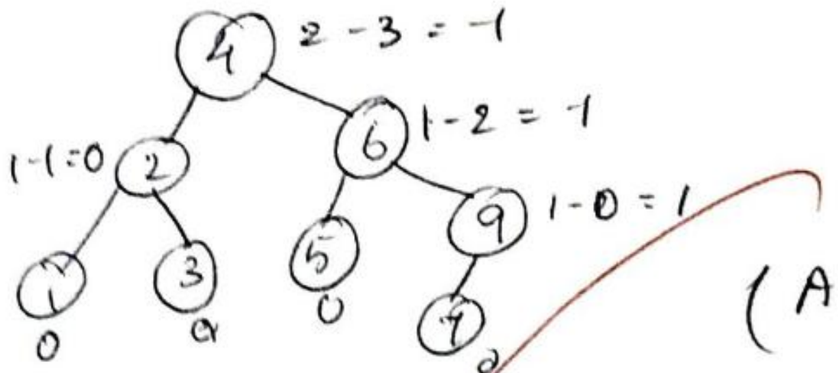








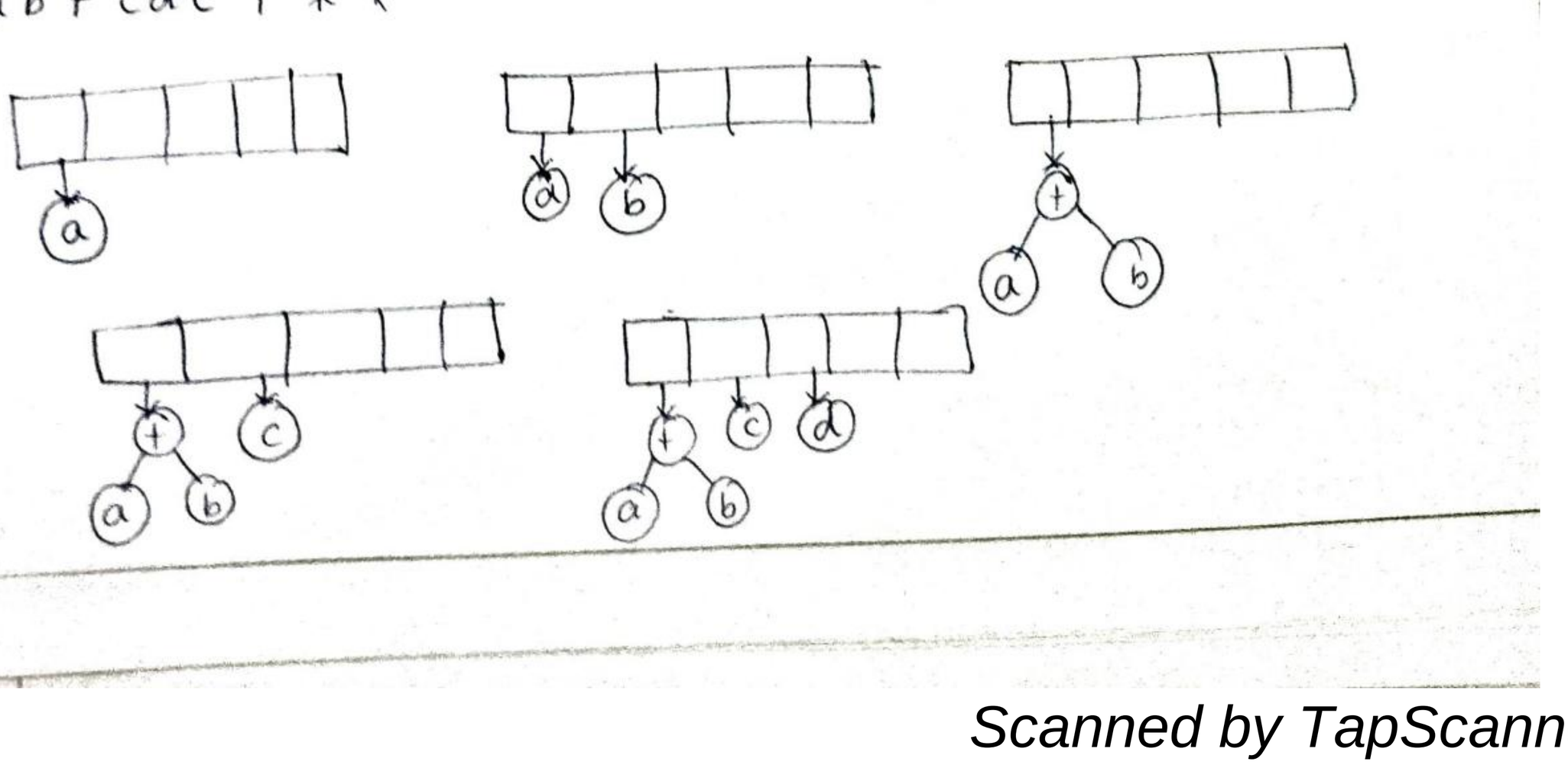
(not balanced)

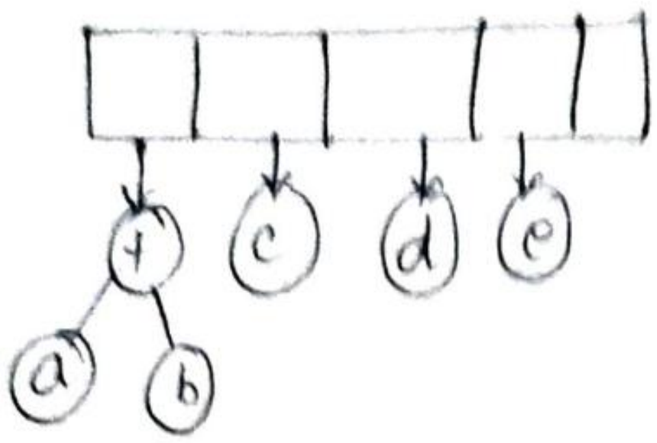
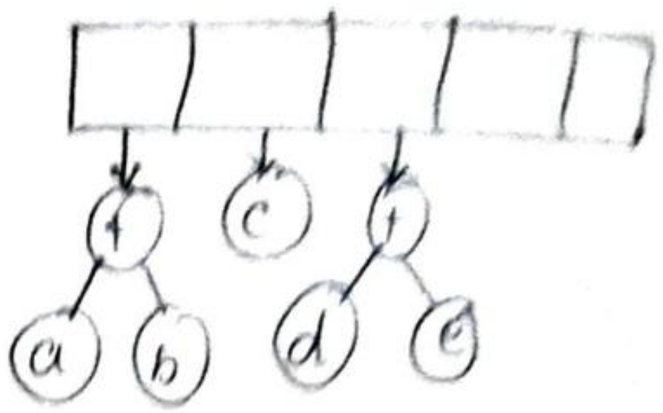
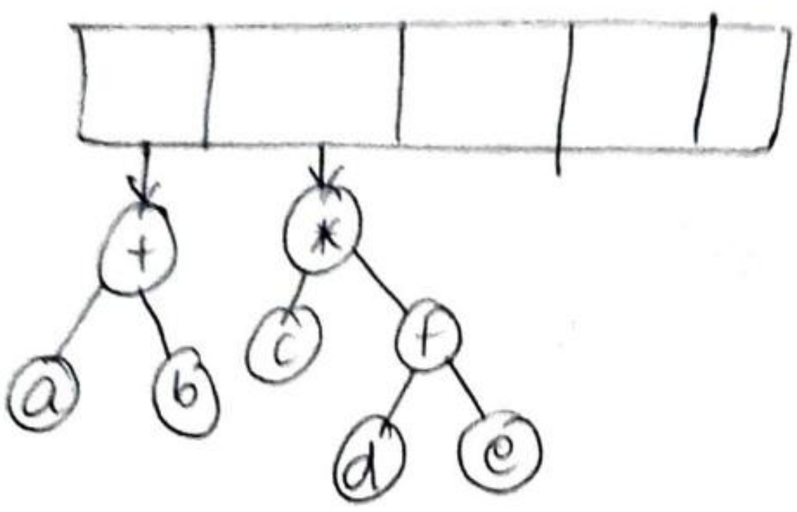
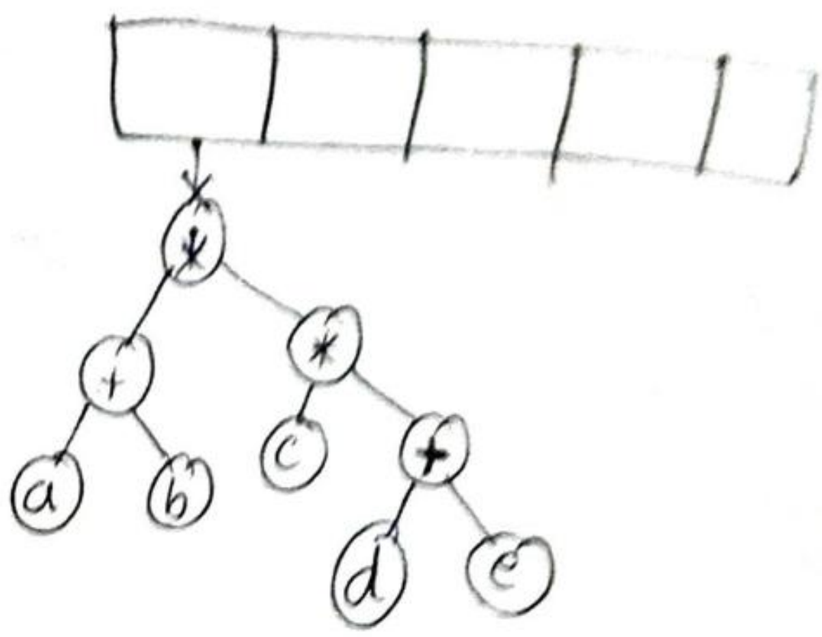


(AVL Tree)

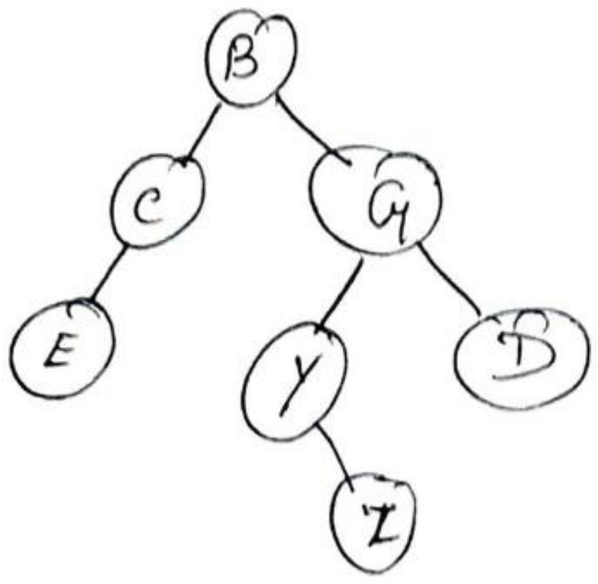
2) Construct an expression tree for the expression.

a b + c d e + * *



3) Perform binary tree traversal for following tree



Inorder tree traversal = E C B Y z G D

Preorder tree traversal = B C E G Y z D

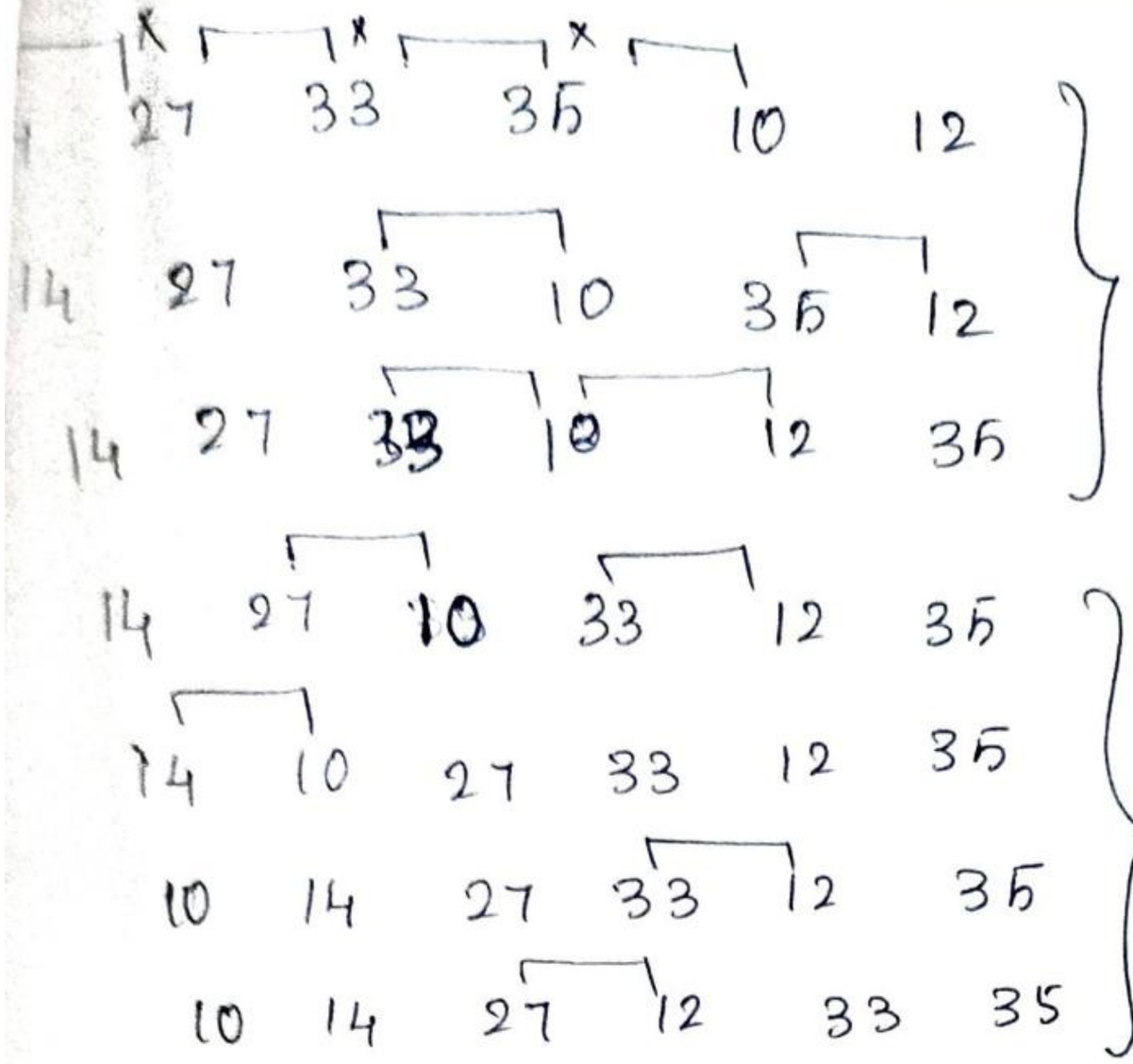
Postorder tree traversal = E C z Y D G B.

4) Sort the following data in ascending order using Bubble Sort.

14 33 27 35 10 12

14 33 27 35 10 12

14 27 33 35 10 12



Ans : 10 12 14 27 33 35.

5) 15 8 34 32 64 51 21 12 Using merge Sort

15 8 34 32 | 64 51 21 12

15 8 | 34 32 | 64 51 | 21 12

8 15 32 34 | 51 64 12 21

8 15 32 34 | 12 21 51 64

Ans : 8 12 15 21 32 34 51 64

Ans : 8 12 15 21 32 34 51 64

6) Sort the numbers using insertion Sort :

5 4 7 2 6

4 5 7 2 6

4 7 7 2 6

4 5 7 2 6

4 5 7 7 6

4 5 5 7 6

4 4 5 7 6

2 4 5 7 6

2 4 5 7 7

2 4 5 6 7

Ans : 2 4 5 6 7