

Construct BT

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1. a. PreOrder: A B C D E F G H I

InOrder: B C A E D G H F I

b. PreOrder: G, B, Q, A, C, K, F, P, D, E, R, H

InOrder: Q, B, K, C, F, A, G, P, E, D, H, R

c. InOrder: B P R E S Q G

PreOrder: Q E P B R S G

2. Evaluate the following prefix expression

"++26+-1324"

3. Convert the following infix expression to post-fix notation

$((a+2) * (b+4)) - 1$

4. Evaluate the post-fix expression

a. 9, 6, 5, +, 5, *, +, 10, +

b. 15, 3, +, 2, 1, 8, *, 10, -

c. 8 2 3 ^ / 2 3 * + 5 1 * -

5. InOrder: E A C K F H D B G

PreOrder: F A E K C D H G B

6. Draw the Binary Search Tree (BST) from the insertion of the integer keys 50, 72, 96, 107, 26, 12, 11, 92, 10, 28, 51, 21. Traverse the tree in Pre, In and Post-order.

7. Draw the BST for the sequence 3, 1, 4, 6, 9, 2, 5, 7 and find traversals.

8. Draw the BST of first 10 Fibonacci numbers and find traversals.

9. Draw the BST for the sequence 50, 72, 96, 94, 107, 26, 12, 11, 9, 2 and find the traversals.

10. Convert $a + b * c + (d * e + f) * g$ to pre & post expression
where $a=1, b=2, c=3, d=4, e=5, f=6$