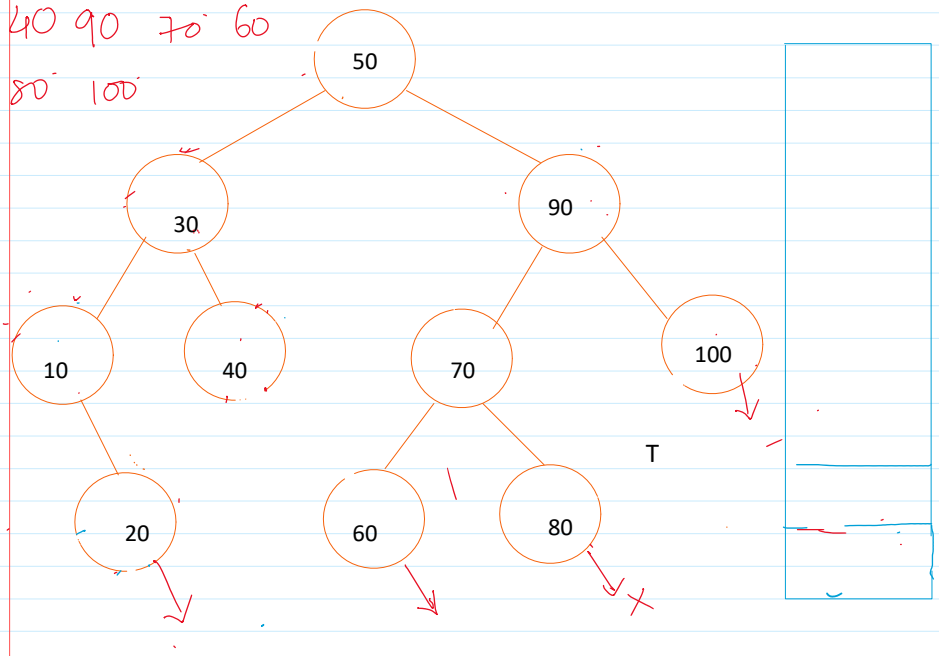
15 October 2024 18:20

Preorder – PLR

50 30 10 20
40 90 70 60
80 100

PLR




```
Struct node *trav = root;

While(trav != NULL || !stack_empty(&S))
{
    While(trav != NULL)
    {
        Printf("%d", trav->data);
        If(trav->right != NULL)
            Push(trav->right, &S);
        Trav = trav->left;
    }

 If(!stack_empty(&S)
 {
 Trav = peek(&S);
 Pop(&S);
 }
 }
```

Start traversal from root.

1) Printf the trav->data.
2) Go to left. But by going to left, we are loosing right node. So if the right node is not NULL, push the address of the right node onto the stack.

3) Take the trav to the left, repeat this until trav is not NULL.

4) Pop the element from the stack if the stack is not empty.
5) Repeat from step 1, as the popped element may have the right and left elements.
   Till either the trav is not NULL or the stack is not empty.