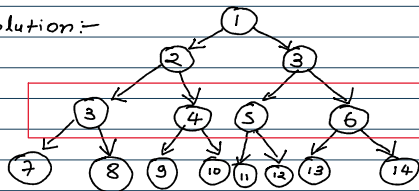


Now we have another Question:-

Q) Problem Statement: Traverse the tree and Print All the elements of given level?

Solution:-



Suppose we have to Print All the elements under red Border...

Now we could solve the problem by Pre, in, or post method...

My thought: (I would solve the problem By Infix Approach)

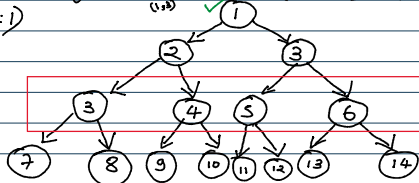
I would Call left Subtree BY using Recursive Approach (See figure Given Below)

SABSE Pehle hum root ko call karenge jo ki abhi currently 1 hi hai...

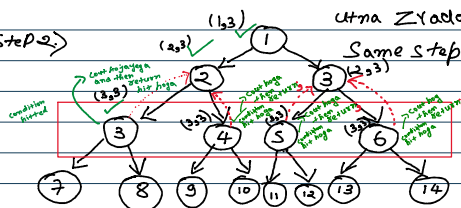
function's structure:-

```
void level_display(TreeNode* root, int lve, int target_lve){
    if (root == NULL) return;
    if (lve == target_lve){
        cout << root->val << " ";
        return; // for optimisation
    }
    level_display(root->left, lve+1, target_lve);
    level_display(root->right, lve+1, target_lve);
}
```

Step: 1)



Step 2)



Utna Zyada Step nahi likhege wahi sab

Same step hoga...

Output Screen

4 5 6 7

Now the function has completed its work.

Now I would Putover a Snapshot of my code and its complete Output...

Assuming target = 2 (0 Based level Indexing)

Step: 1)

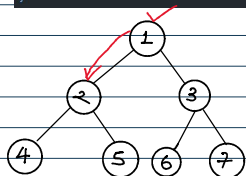
```
void nth_level_display(node* root, int lvl, int t_lvl){
    if (root == NULL) return;
    if (lvl == t_lvl){
        cout << root->val << " ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

Step: 2)

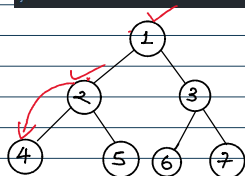
```
void nth_level_display(node* root, int lvl, int t_lvl){
    if (root == NULL) return;
    if (lvl == t_lvl){
        cout << root->val << " ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

Step: 3)

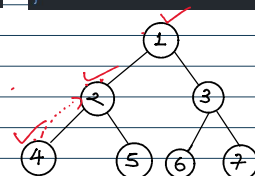
```
void nth_level_display(node* root, int lvl, int t_lvl){
    if (root == NULL) return;
    if (lvl == t_lvl){
        cout << root->val << " ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```



Step: 4)



Step: 5)

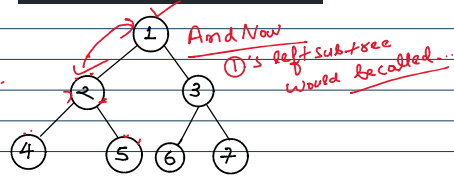
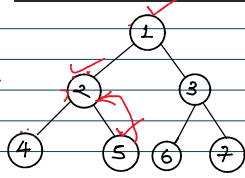
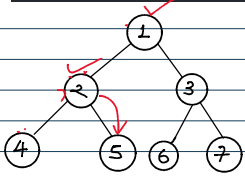


Step: 6)

```
void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l30 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl); Already called
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

```
void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

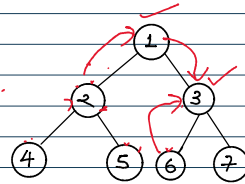
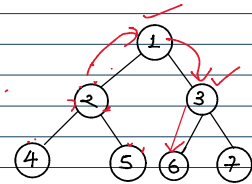
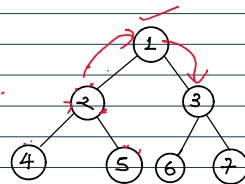
```
void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```



```
Step 2) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l30 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl); Now right would be called
}
```

```
Step 3) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

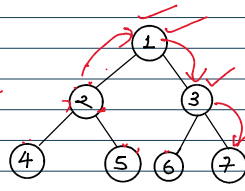
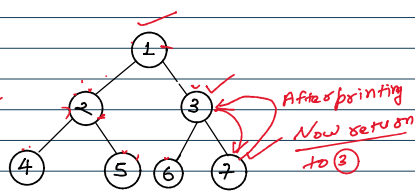
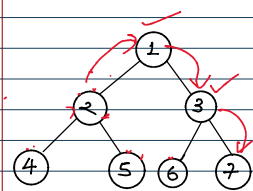
```
Step 4) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```



```
Step 10) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

```
Step 10) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

```
Step 10) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```



```
Step 6) void nth_level_display(node* root, int lvl, int t_lvl){
    if(root == NULL) return; l32 l31 l32
    if(lvl == t_lvl){ l32
        cout<<root->val<<" ";
        return;
    }
    nth_level_display(root->left, lvl+1, t_lvl);
    nth_level_display(root->right, lvl+1, t_lvl);
}
```

