Saturday, 26 March 16

Crux Lecture -17

Data Structures -5

Trees -2

Manisha Khattar



Last Class Doubts?



Last Class Problems?



A tree walk or traversal is a way of visiting all the nodes in a tree in a specified order.



Lets code these tree traversals

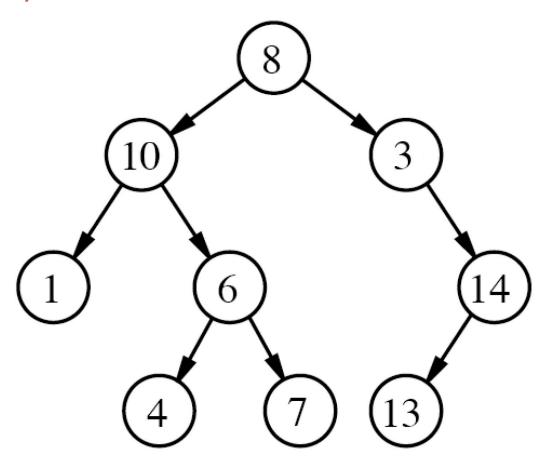
- Preorder Traversal(Recursive)
- Preorder Traversal(Iterative)
- 3. Postorder Traversal
- 4. Levelorder Traversal



Binary Trees



Binary Trees





Binary Tree Node

```
Public class node{
  int data;
  node left;
  node right;
}
```



Lets see how to input and output Tree

- Write a function to take tree as input from user
- 2. Print out a tree



Lets discuss a problem

1. Find diameter of a binary tree



Your Turn

- Height of the tree
- 2. Find a node in Binary Tree
- 3. Mirror a binary tree



Another Traversal for Binary Trees

Inorder Traversal



Building tree using Preorder and Inorder traversal



Building tree using Postorder and Inorder traversal



Building tree using Preorder and Postorder traversal





Thank You!! ©

Manisha Khattar

manisha@codingblocks.com