Sunday, 20 March 16

Crux Lecture - 17

Data Structures - 5

Trees -2

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### 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

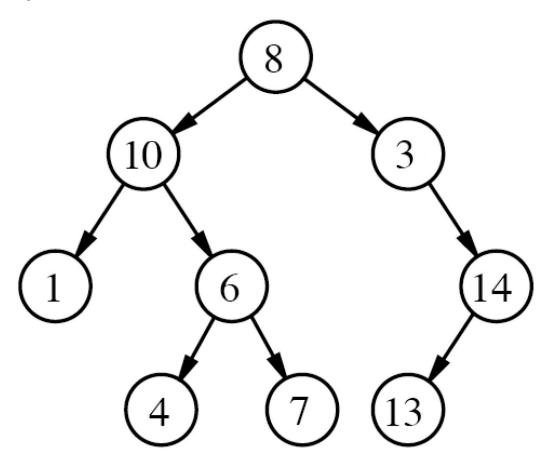
- Preorder Traversal
- Postorder Traversal



### 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
- Print out a tree



#### Lets discuss a problem

- Height of the tree
- Find diameter of a binary tree



#### Your Turn

- Find a node in Binary Tree
- 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!! ©

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