

CS231 Fall 2013 Lecture 28

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1 Administrative Topics

- We take the quiz.
- Dale will be lecturing Monday, and probably Wednesday of next week while I am in Santa Barbara.

2 Level-Order Traversals

There is also a level-order ordering, in which the node at level 0 is visited first, then all nodes at level 1, then all nodes at level 2, etc. What does a level-order traversal of these trees yield?

How do we implement a level-order traversal? The basic idea is that we begin with just the root node in the queue. Then we loop: we take the first Node out of the queue and puts its children at the end of the queue. We do this until every node has been in and out of the queue.

```
public void printLevelOrder(TreeNode root) {  
    Queue q = new Queue();  
    q.enqueue(root);  
    while( ! q.isEmpty()) {  
        TreeNode node = (TreeNode) q.dequeue();  
        if(node != NULLNODE) {  
            print(node.data);  
            q.enqueue(node.left);  
            q.enqueue(node.right);  
        }  
    }  
}
```

```
        }
    }
    q.enqueue(node.right);
}
```