

# CompSci 100e

## Program Design and Analysis II

March 22, 2011

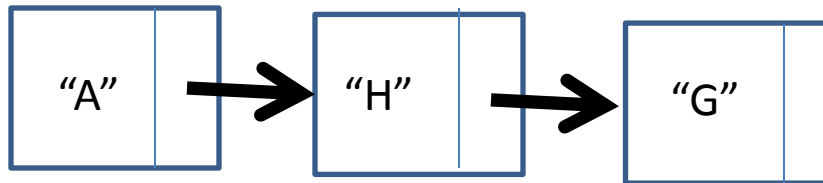
Prof. Rodger

# Announcements

- APT due tonight, Percolation due Thursday
- New APT out tonight
- Today – Linked Lists

# Linked Lists

- Way to organize data in a list
  - Exact fit
  - Memory for one data item called “Node”
  - Nodes are linked together



# Node

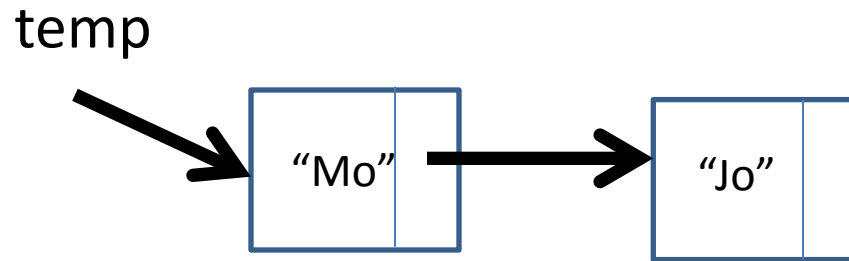
```
public static class Node {  
    String info;  
    Node next;  
  
    public Node(String str, Node nt) {  
        info = str;  
        next = nt;  
    }  
}
```

```
Node temp = new Node("Jo", null);
```



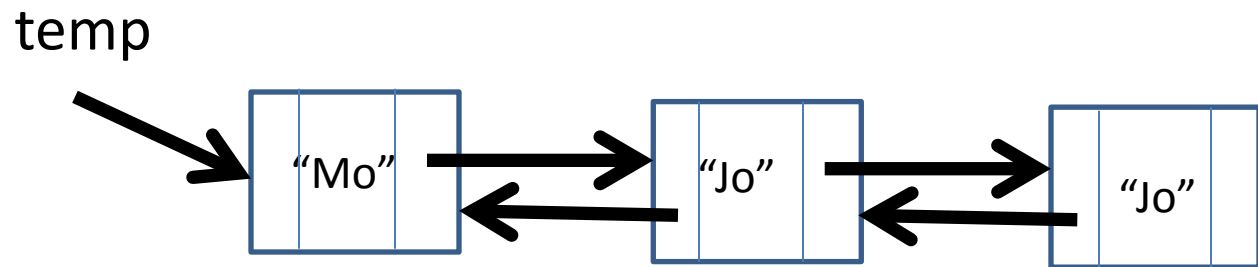
# Connect nodes with the next field

```
temp = new Node("Mo", temp);
```



# Doubly Linked Lists

Next and prev fields



# Classwork 11

- Linked lists
  - Build linked lists
  - Print linked lists
  - Use recursion
  - Double a list
- Doubly Linked lists
  - Build a list
  - Print Reverse of List
  - Move To Front