# Deleting a node
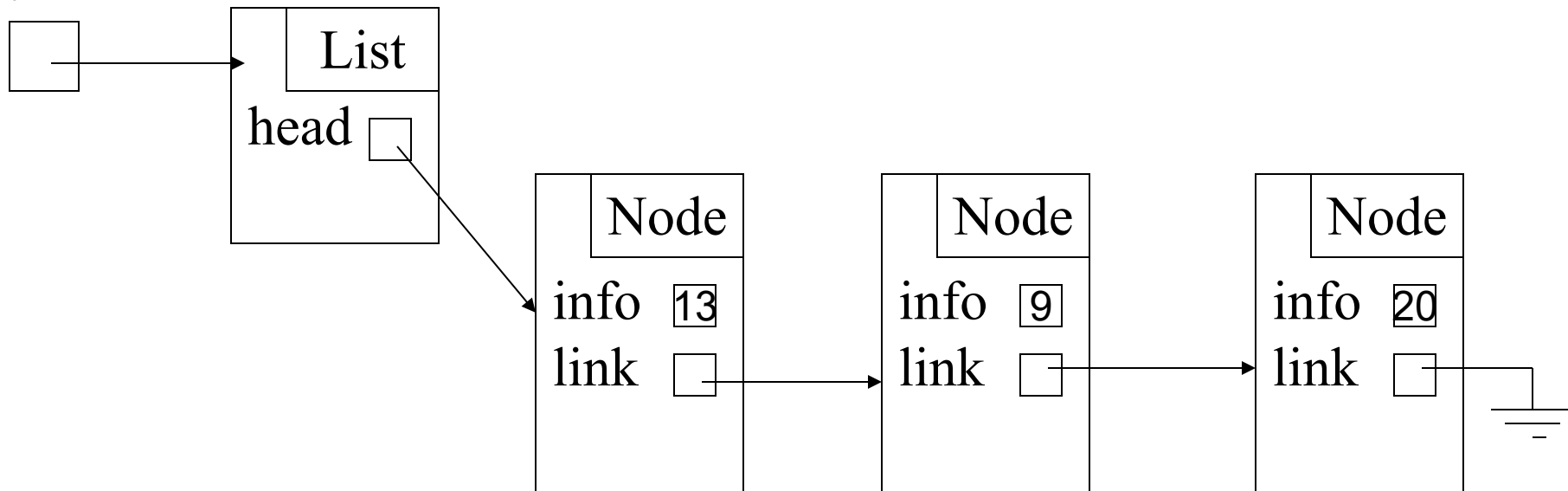
# Problem

- Consider the following linked list where we wish to remove a specific Node.

**myList**

List

head

Node
info 13
link

Node
info 9
link

Node
info 20
link

# Solution

- Step 1: Find the correct location of the Node to be removed

- Step 2: Adjust the links so that this Node is snipped out
  - The reference to the deleted node is redirected to the following node (or null if there is no following node)

# The Syntax

- The following method *delete* will receive a variable called item of type int.

  – This method will traverse through the linked list and delete the first Node containing item

- Again, we need to create two reference variables. One pointing to the current Node and one pointing to the previous one.

```java
public void delete (int item)
{
            //SEARCH FOR NODE
            Node current = head;   // current points to the current Node
            Node previous = null;    // previous points to the previous Node
                                              // The new Node will we inserted between previous and current
            boolean found = false;    // Once the Node is found, found will be true
            while (found==false && current != null){
                        if (item == current.info)
                                    found = true;
                        else
                        {
                                    previous = current;    // moves along the list
                                    current = current.link;
                        }
            }

            // DELETE NODE
            if (found == true) {   // Node was found in list
                        if (current == head)
                                    head = head.link;  // if Node being removed is first Node
                                                // That is there is no previous.link
                        else
                                    previous.link = current.link;   //bypass current
            }
}
```