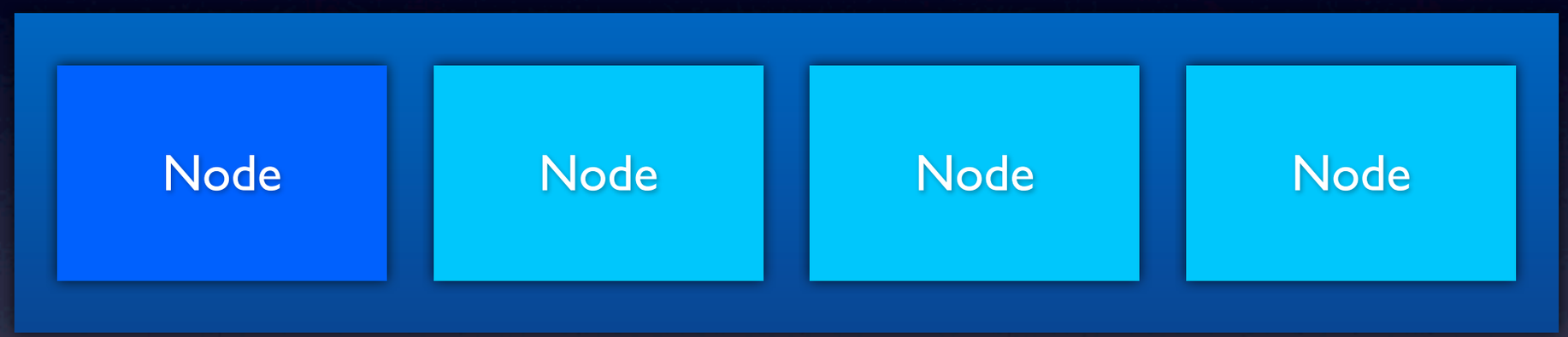
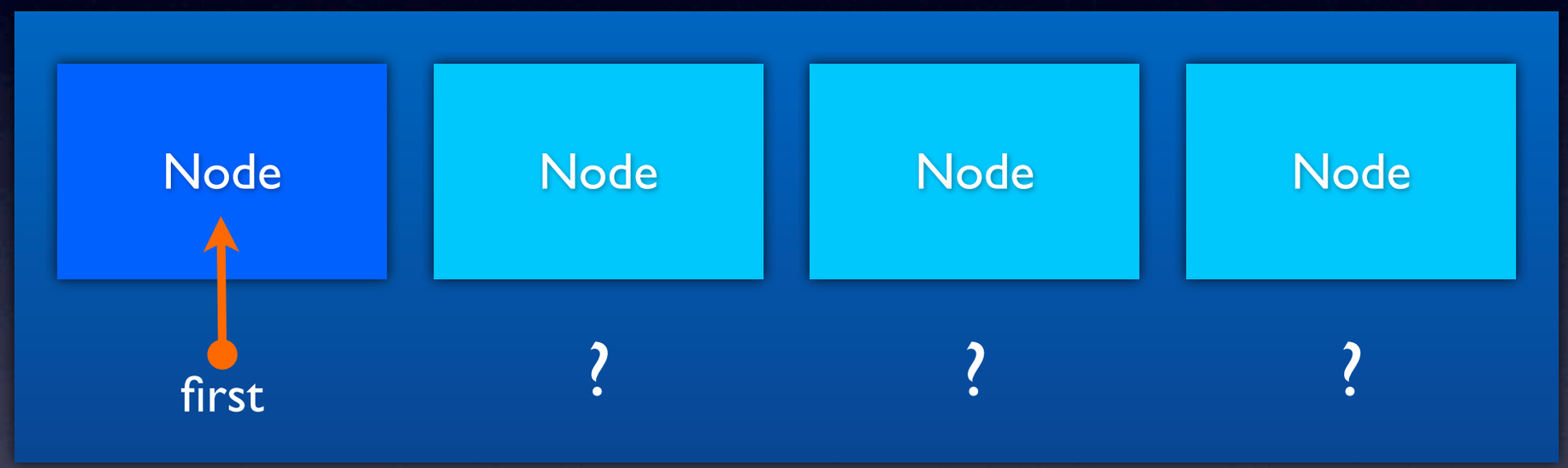
Linked List

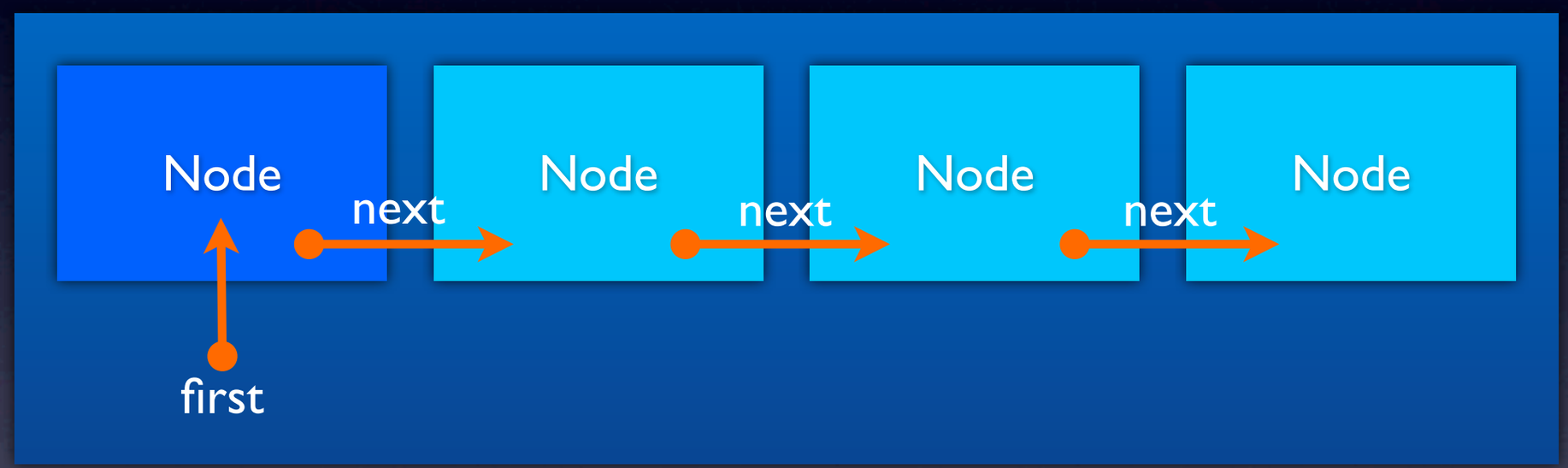
Linked List



Linked List



Linked List



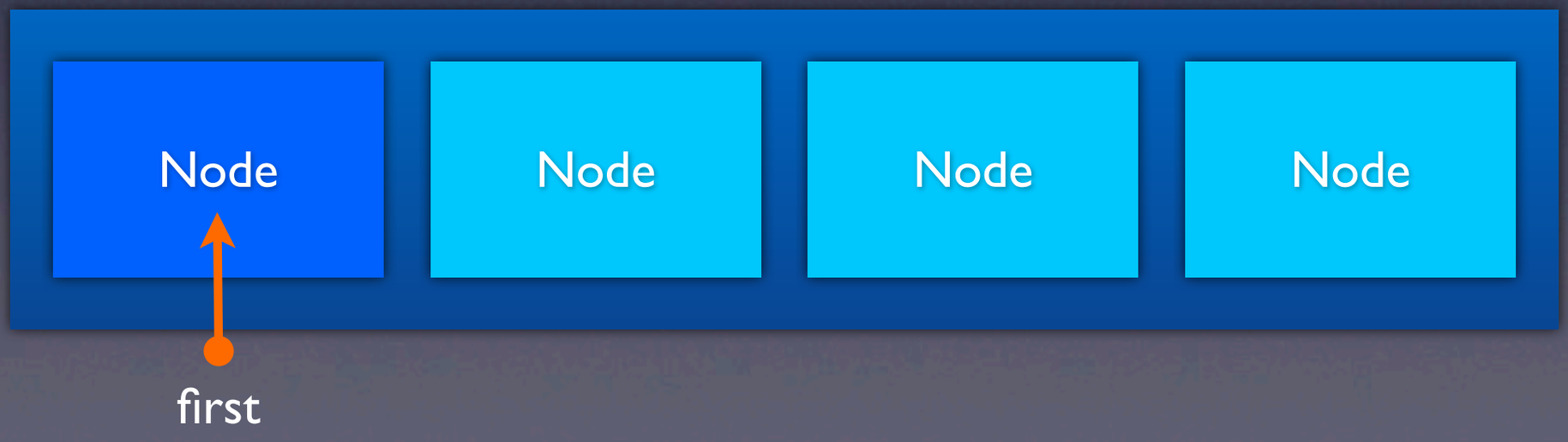
next = Referenz auf die nächste Node

```
public class SinglyLinkedList<T> {

    private int size = 0;

    private static class Node<T> {
        T value;
        Node<T> next;

        private Node(T value, Node<T> next) {
            this.value = value;
            this.next = next;
        }
    }

    Node<T> first = null;
```

Erstes Element hinzufügen

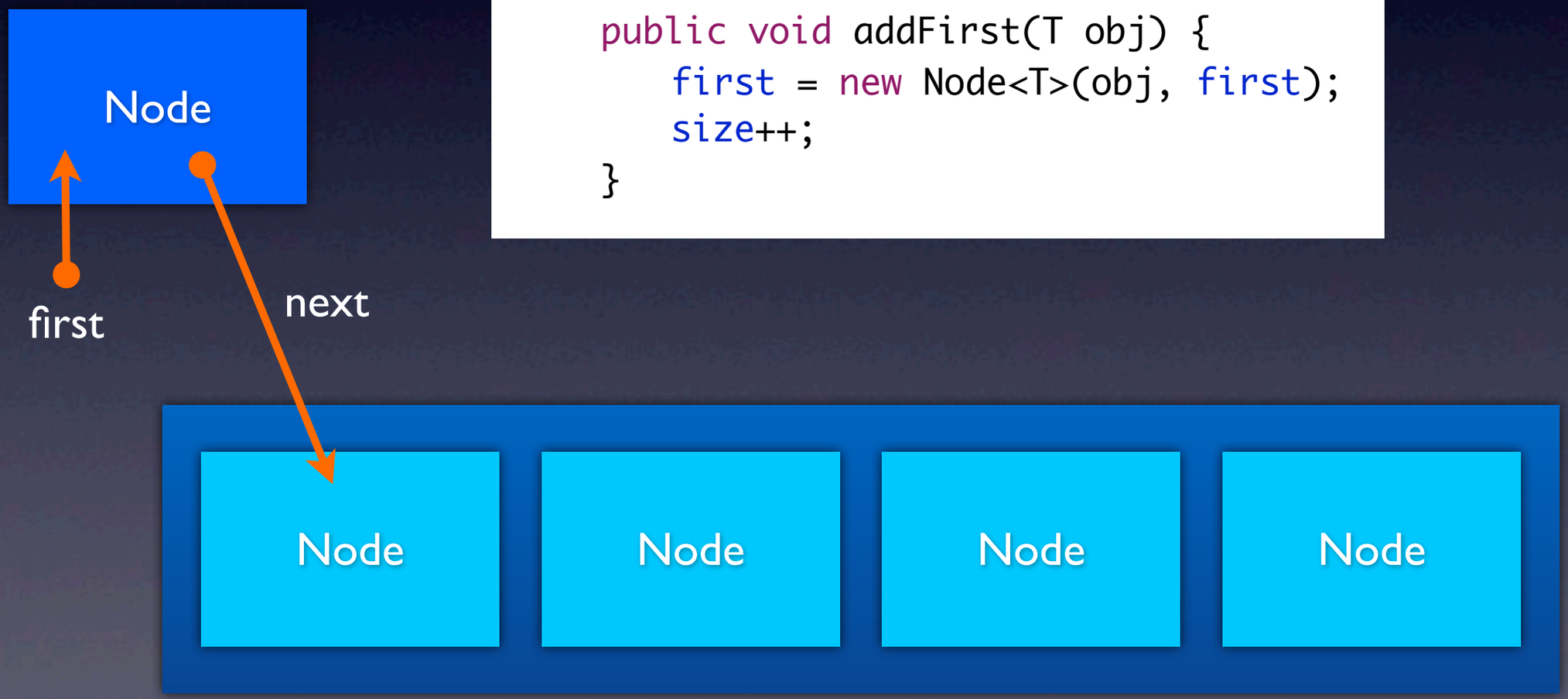
Node

```
public void addFirst(T obj) {
    first = new Node<T>(obj, first);
    size++;
}
```



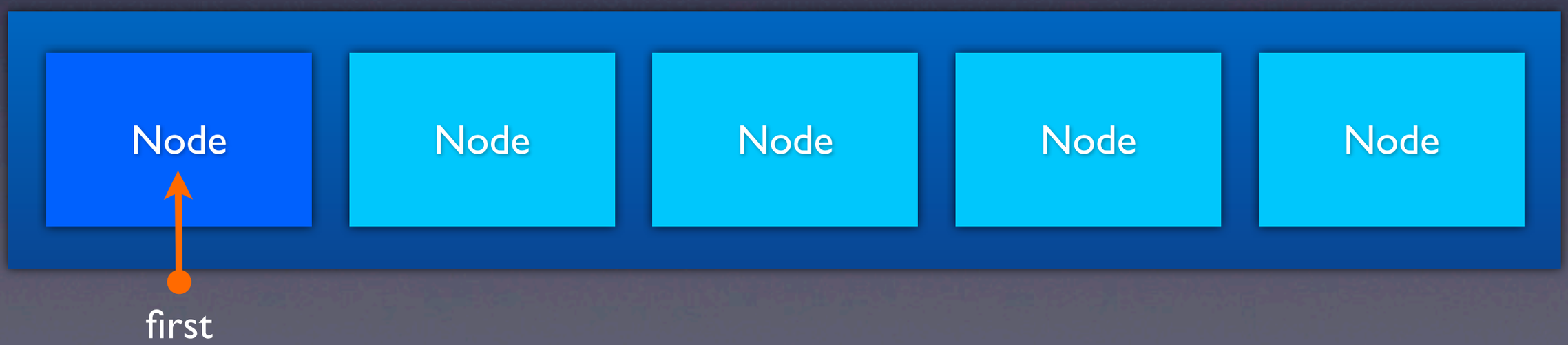
Erstes Element hinzufügen

```
public void addFirst(T obj) {
    first = new Node<T>(obj, first);
    size++;
}
```



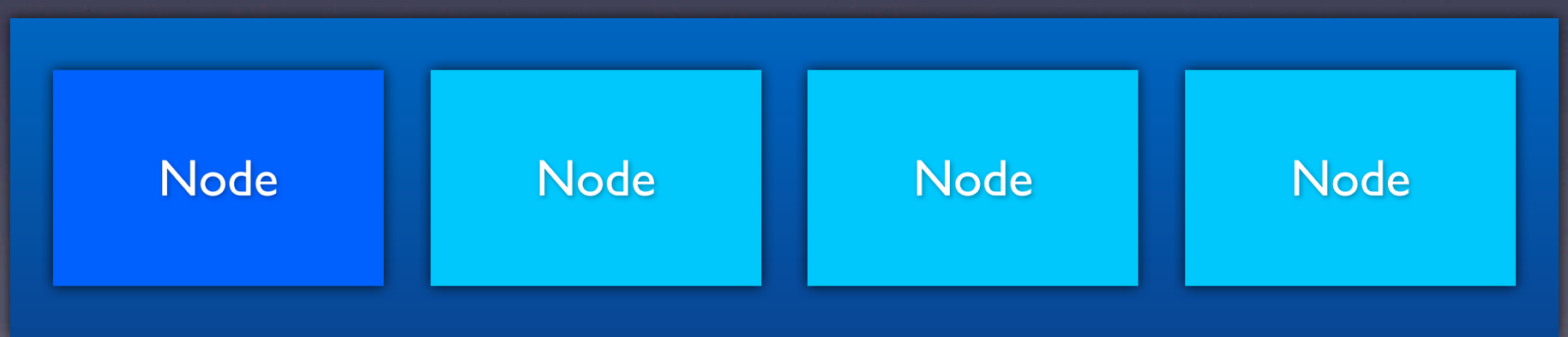
Erstes Element hinzufügen

```
public void addFirst(T obj) {
    first = new Node<T>(obj, first);
    size++;
}
```

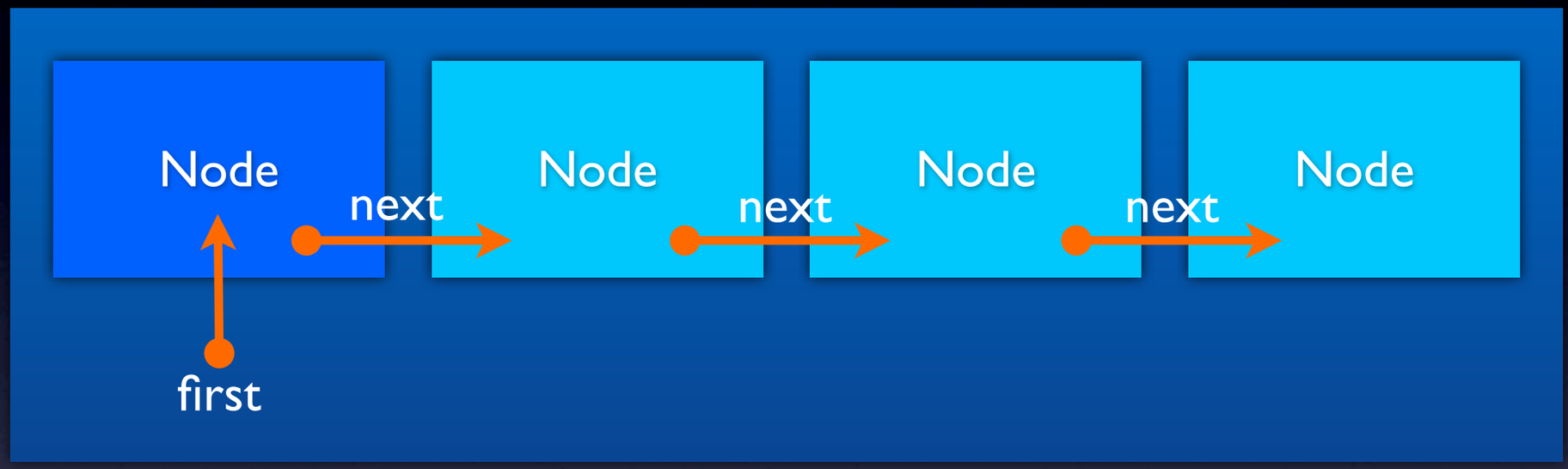


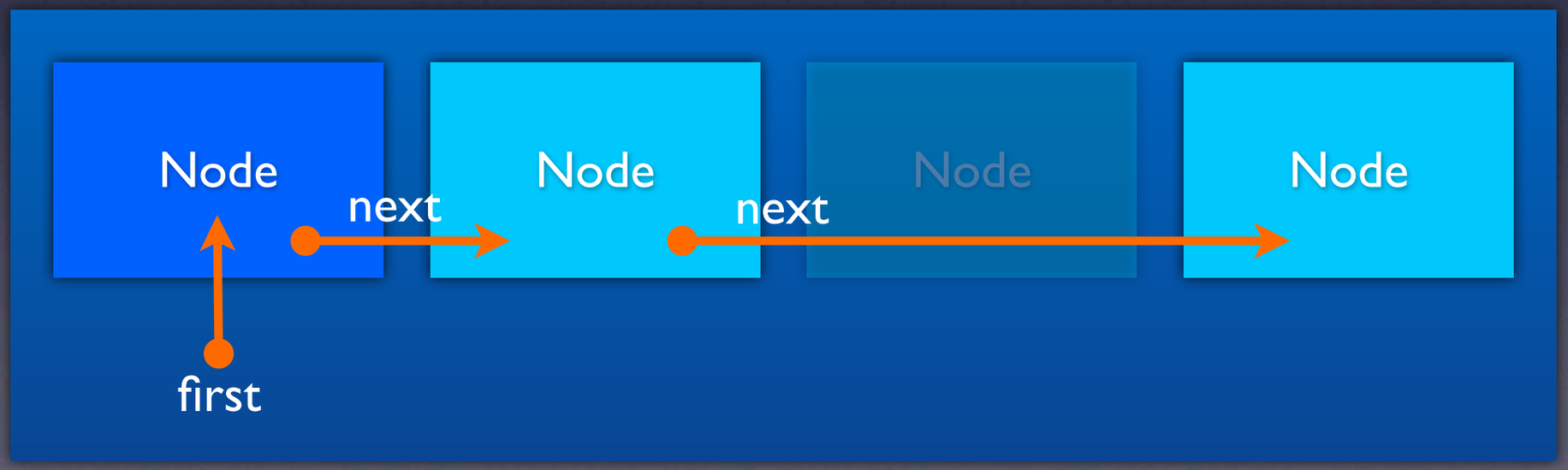
Index eines Objects finden

```
public int indexOf(T obj) {
    Node<T> p = first;
    int i = 0;
    while(p != null && !p.value.equals(obj)) {
        p = p.next;
        i++;
    }
    return p != null ? i : -1;
}
```



Objekt löschen





Aufgabenstellung

Es sollen folgende Methoden ergänzt werden:

- public boolean contains(T obj)
- public void addLast(T obj)
- public boolean remove(T obj)