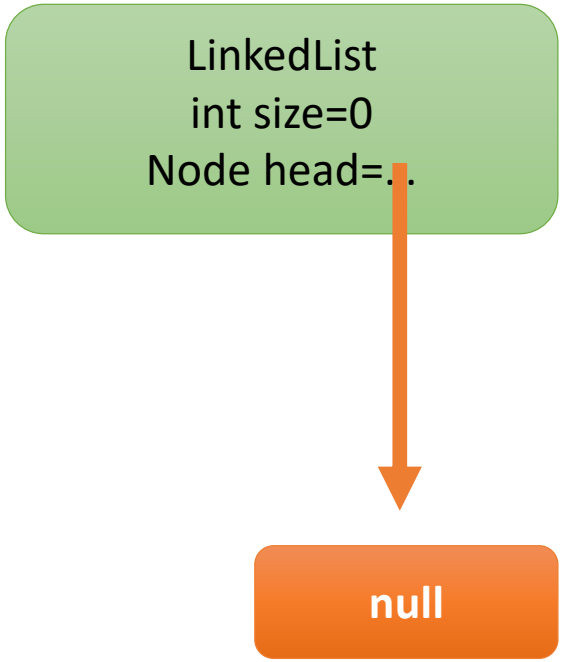
Algoritmer og datastrukturer

Økt 6B – Operasjoner på lenkede lister

Empty Linked list

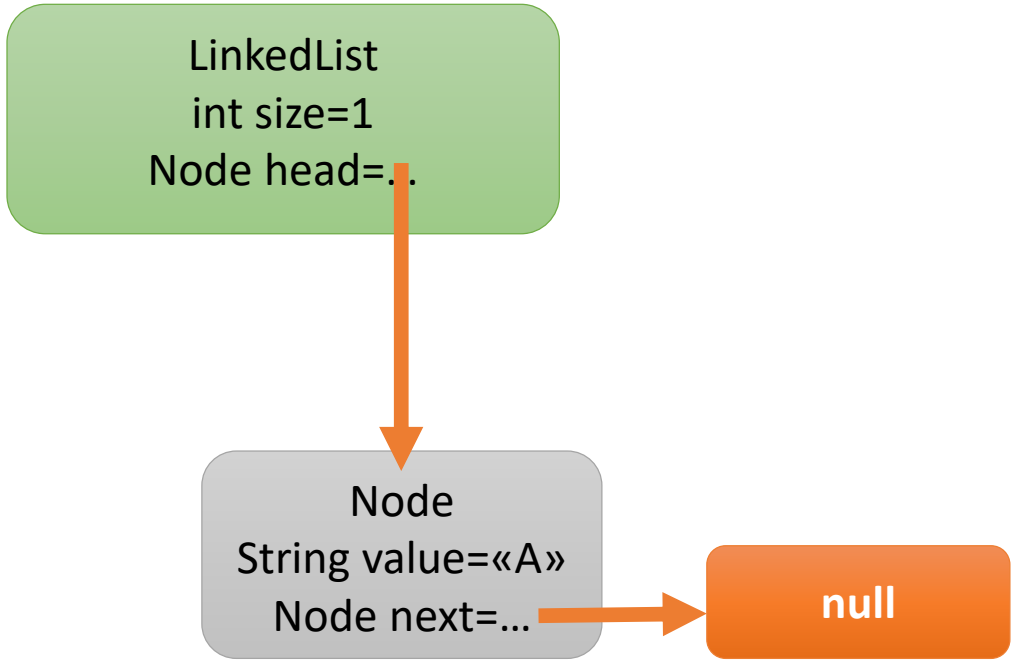
```
//Lager en bedre lenket liste
LinkedList my_linked_list = new LinkedList();
```



Add elements

```
public void add(String value) {
    Node new_node = new Node(value, head);
    head = new_node;
}
```

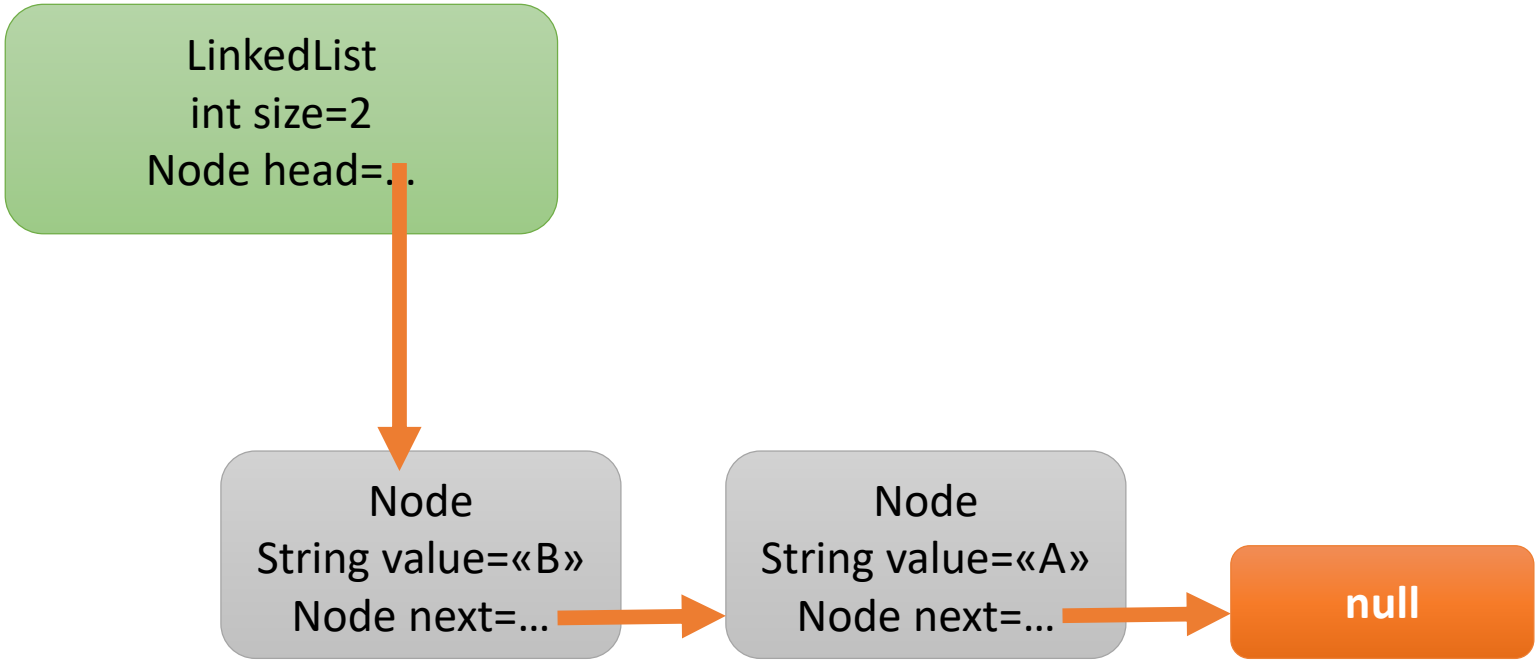
```
//Lager en bedre lenket liste
LinkedList my_linked_list = new LinkedList();
my_linked_list.add("A");
```



Add elements

```
public void add(String value) {
    Node new_node = new Node(value, head);
    head = new_node;
}
```

```
//Lager en bedre lenket liste
LinkedList my_linked_list = new LinkedList();
my_linked_list.add("A");
my_linked_list.add("B");
```



Add elements

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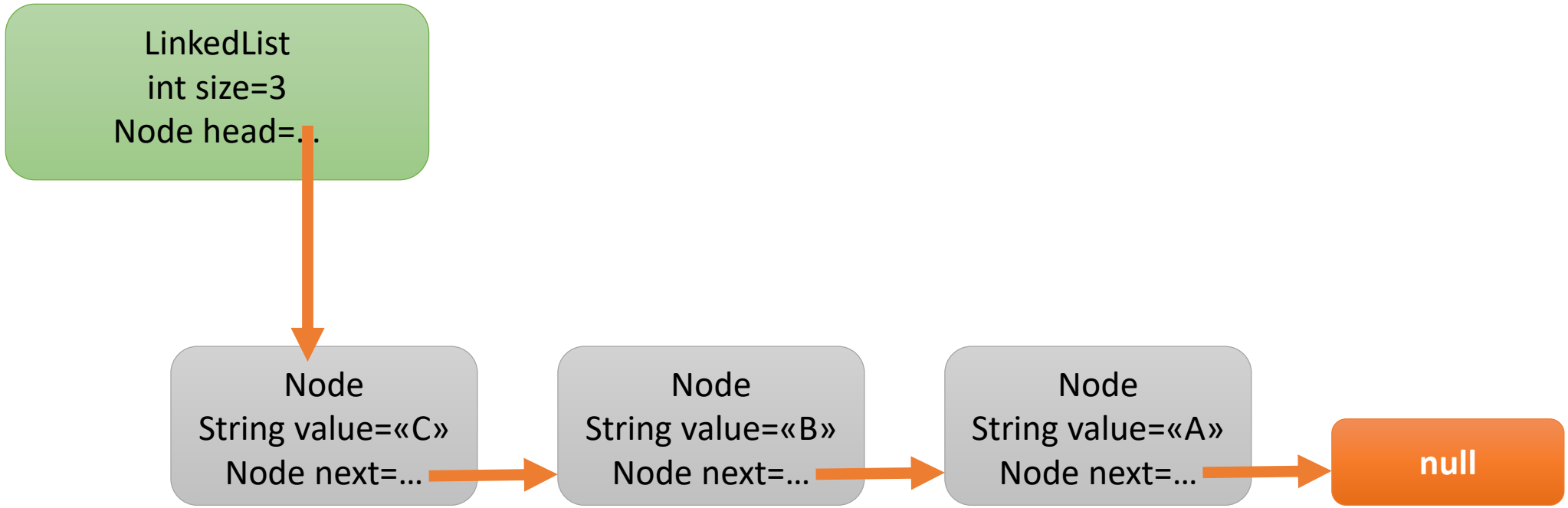
public void add(String value) {
    Node new_node = new Node(value, head);
    head = new_node;
}
```

```
//Lager en bedre lenket liste
LinkedList my_linked_list = new LinkedList();
my_linked_list.add("A");
my_linked_list.add("B");
my_linked_list.add("C");
```



Add elements

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public void add(String value) {
    Node new_node = new Node(value, head);
    head = new_node;
}
```
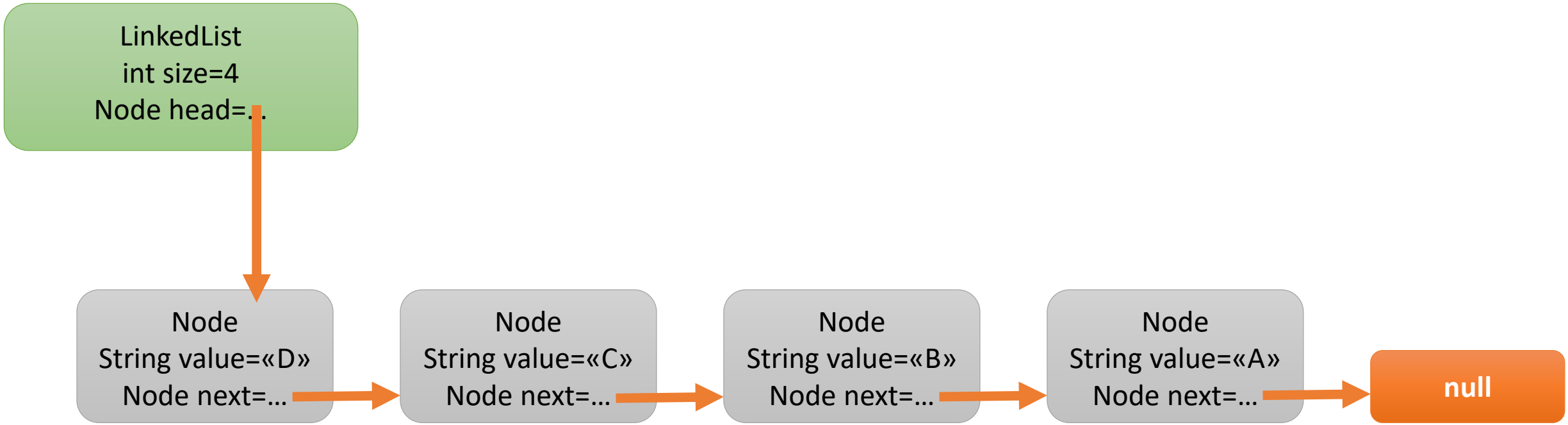
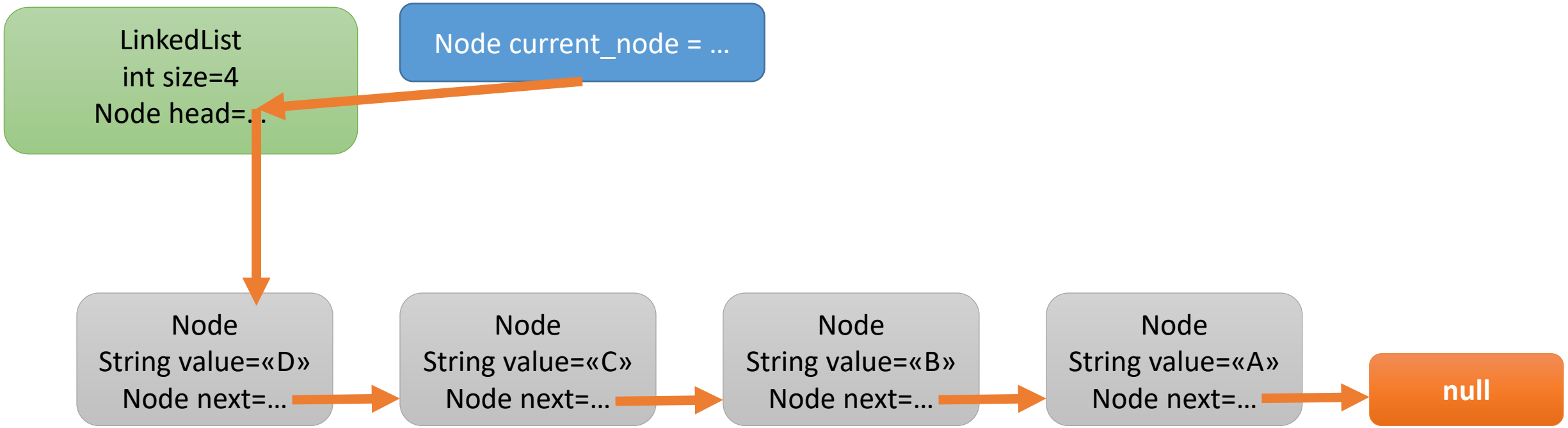

```
//Lager en bedre lenket liste
LinkedList my_linked_list = new LinkedList();
my_linked_list.add("A");
my_linked_list.add("B");
my_linked_list.add("C");
my_linked_list.add("D");
```



Insert elements

```
my_linked_list.insert( value: "E",  index: 2);
```

```
public void insert(String value, int index) {
    Node current_node = head;
    for (int i=0; i<index - 1; ++i) {
        current_node = current_node.getNext();
    }
```



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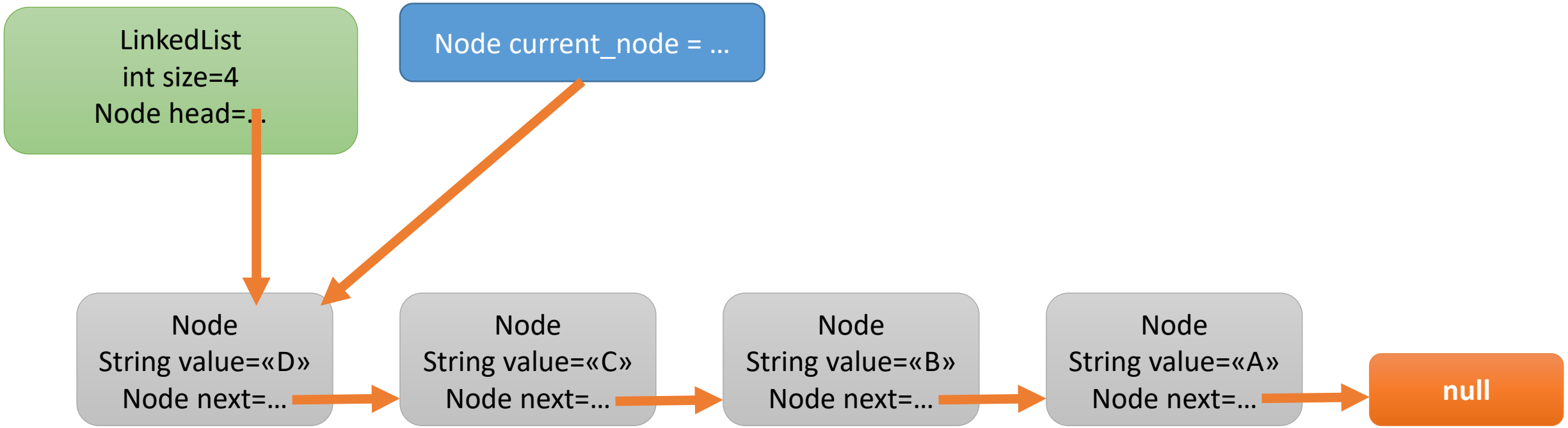

Insert elements

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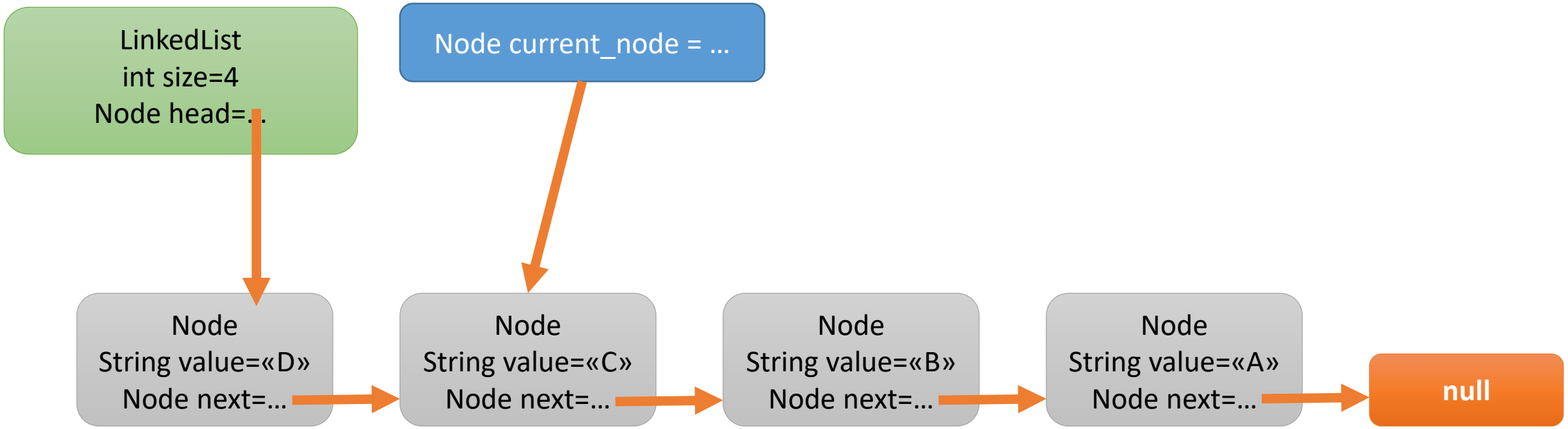

Insert elements

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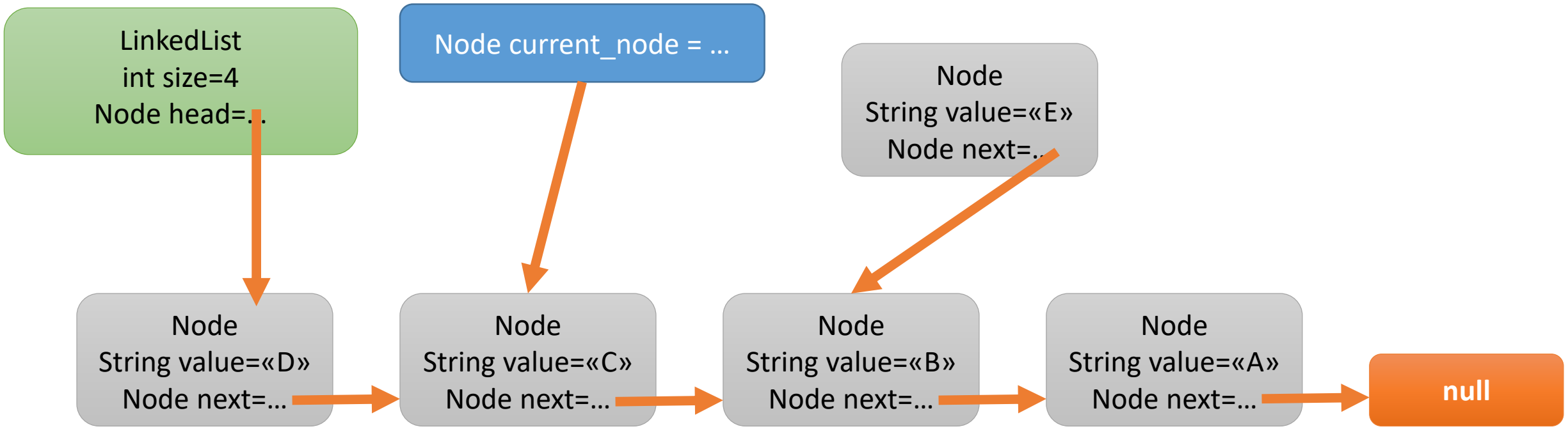
public void insert(String value, int index) {
    Node current_node = head;
    for (int i=0; i<index - 1; ++i) {
        current_node = current_node.getNext();
    }
    Node new_node = new Node(value, current_node.getNext());
```



Insert elements

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my_linked_list.insert( value: "E",  index: 2);
```

```
public void insert(String value, int index) {
    Node current_node = head;
    for (int i=0; i<index - 1; ++i) {
        current_node = current_node.getNext();
    }
    Node new_node = new Node(value, current_node.getNext());
    current_node.next_node = new_node;
```