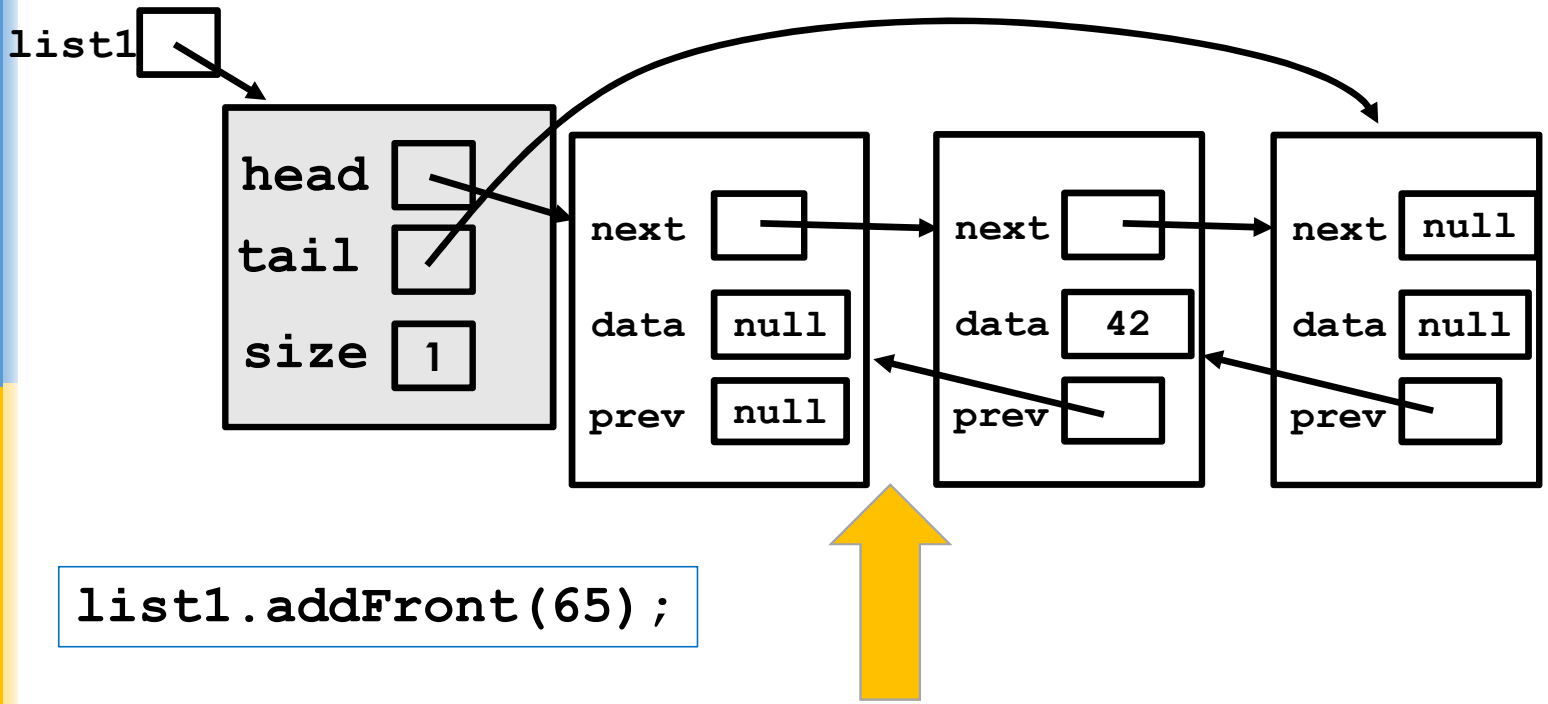
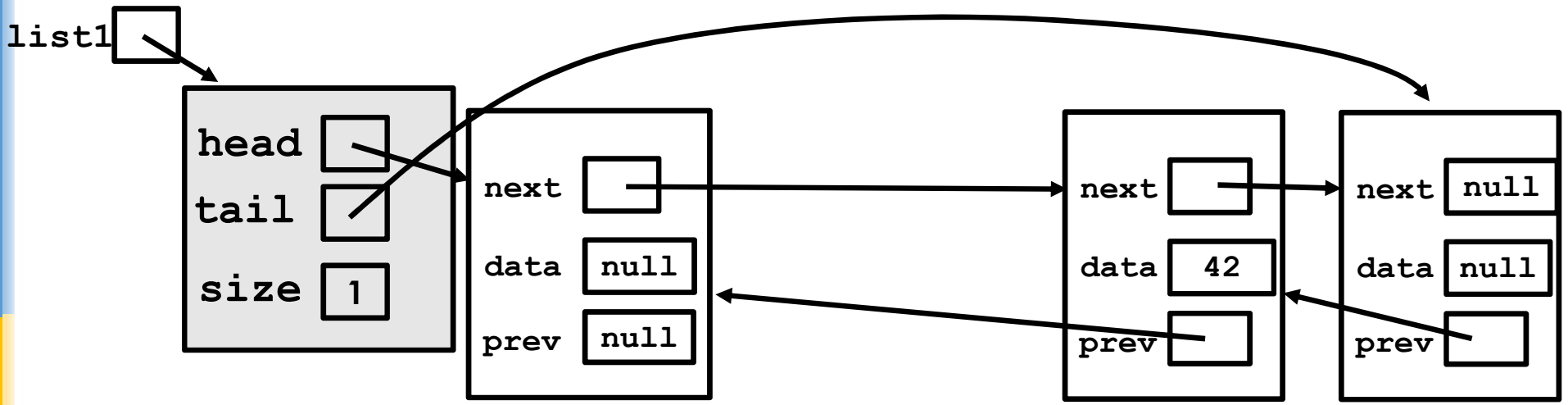
Support: Adding to a Linked List

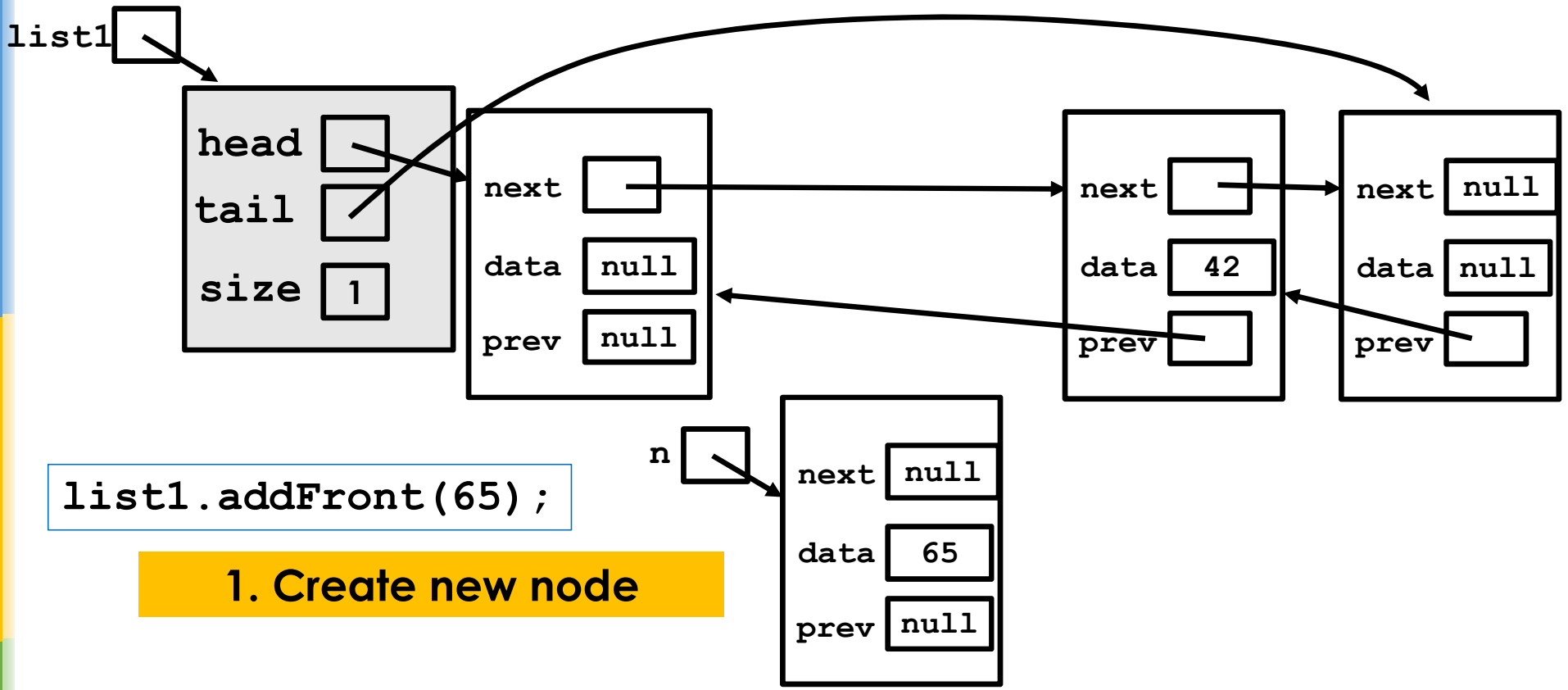
Adding a node




```
list1.addFront(65);
```

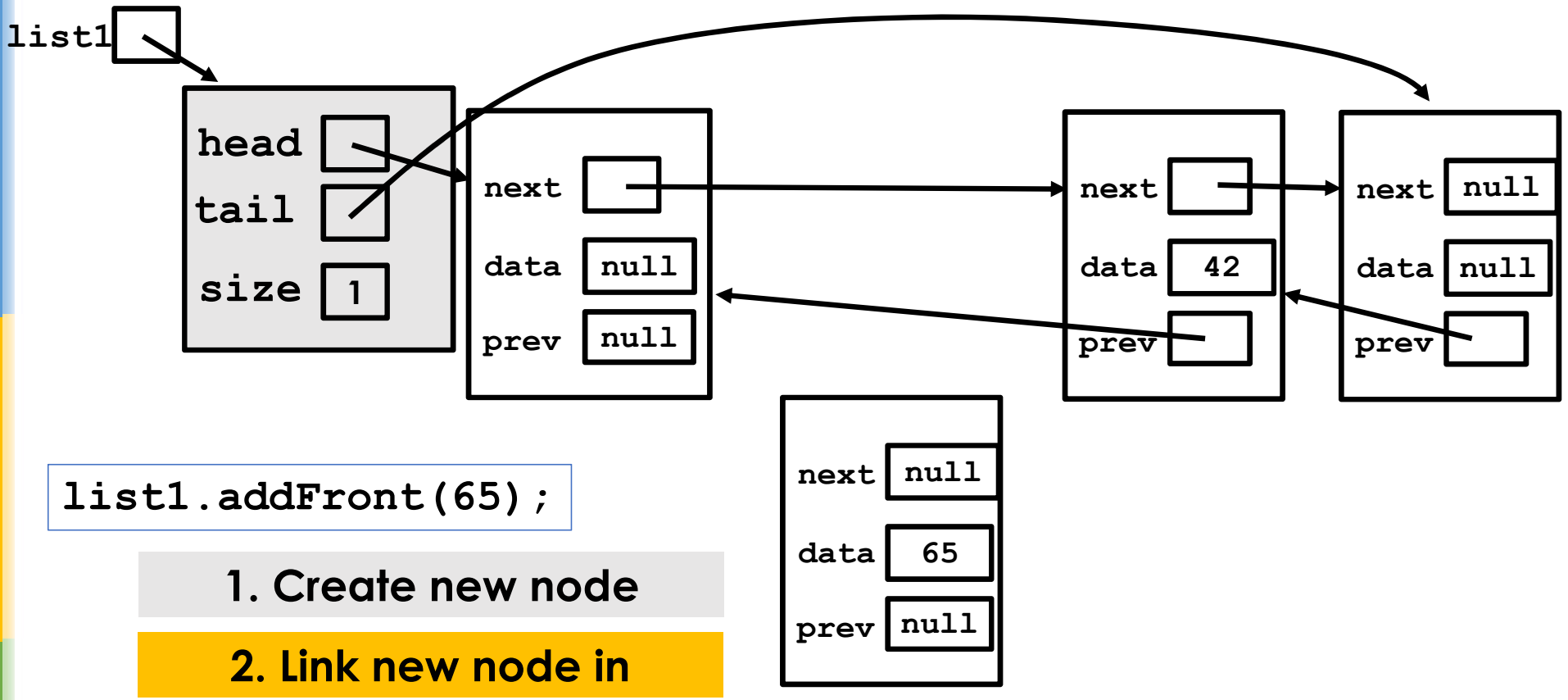



```
list1.addFront(65);
```




```
list1.addFront(65);
```

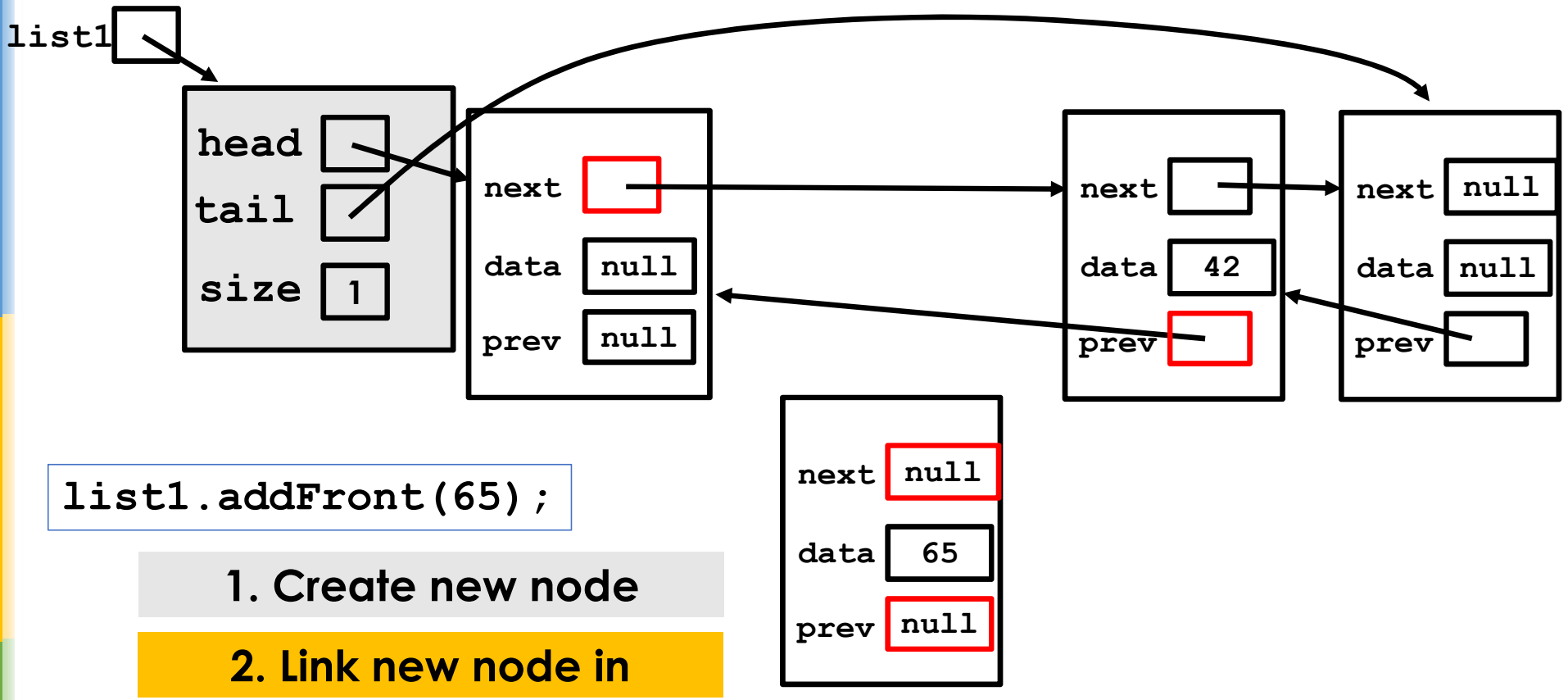
1. Create new node




```
list1.addFront(65);
```

1. Create new node

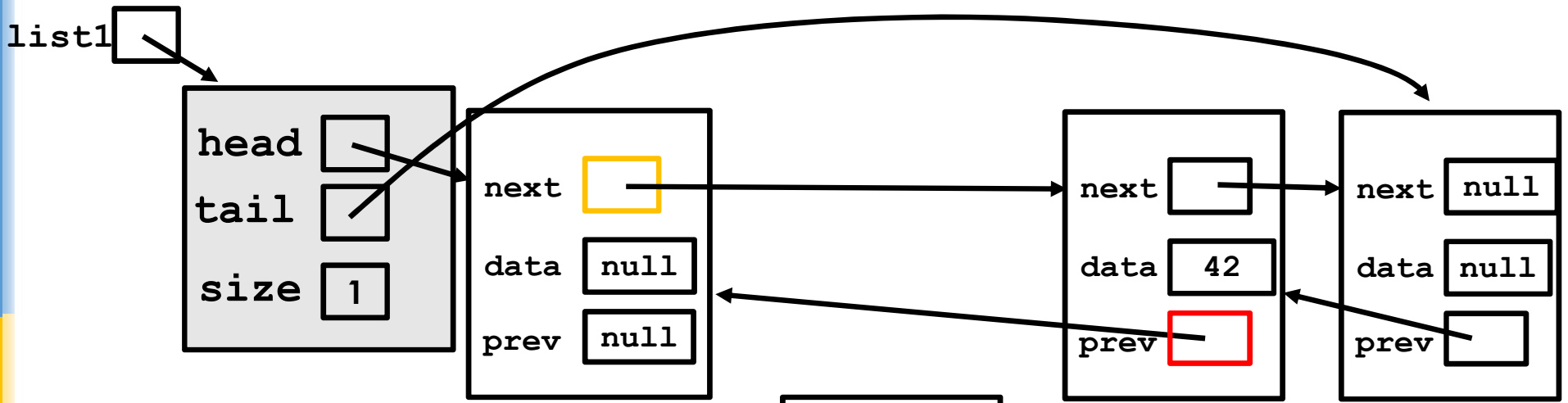
2. Link new node in



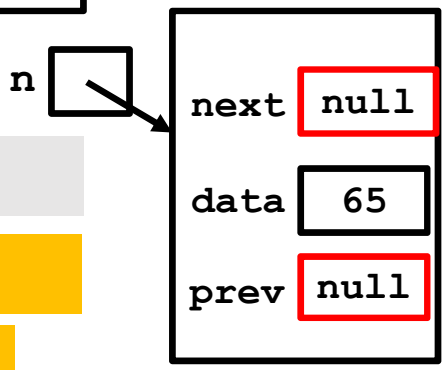

```
list1.addFront(65);
```

1. Create new node

2. Link new node in



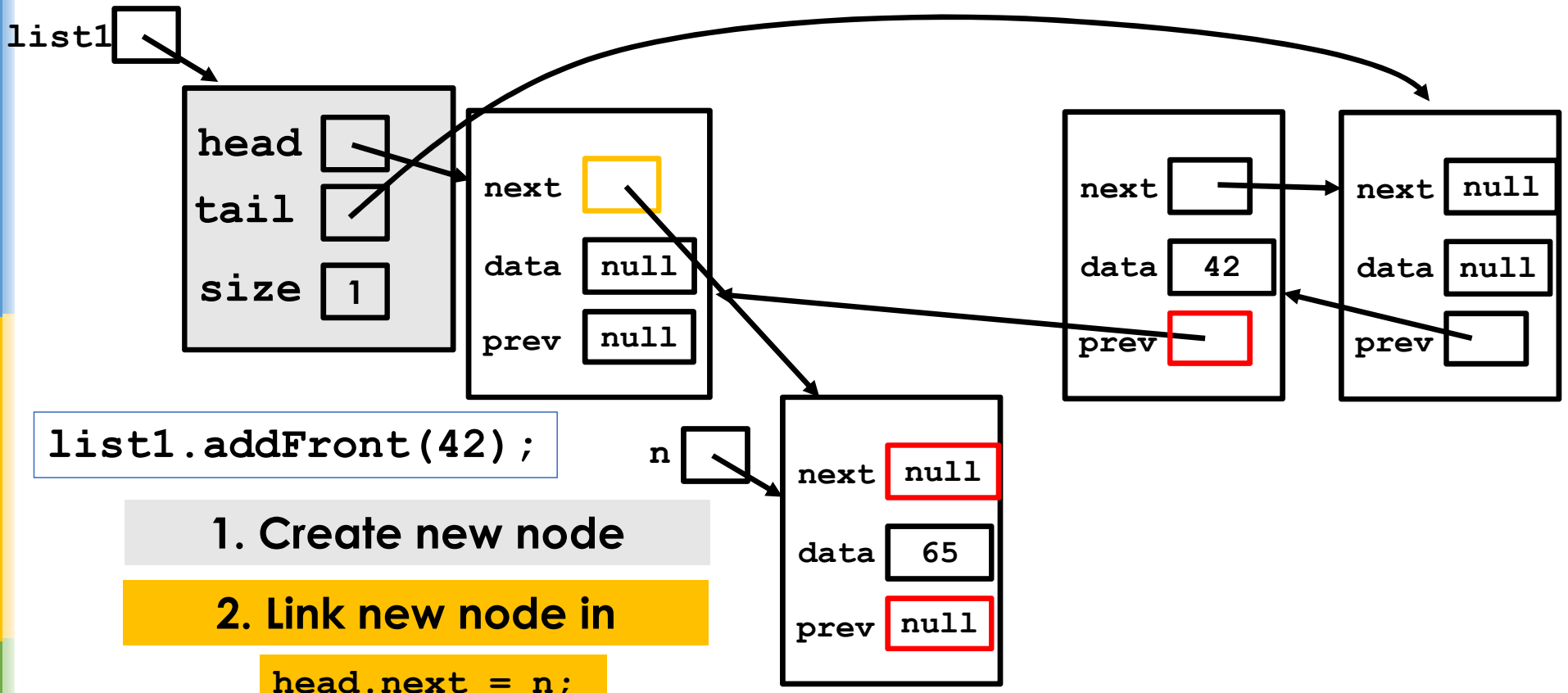

```
list1.addFront(42);
```



1. Create new node

2. Link new node in

```
head.next = n;
```

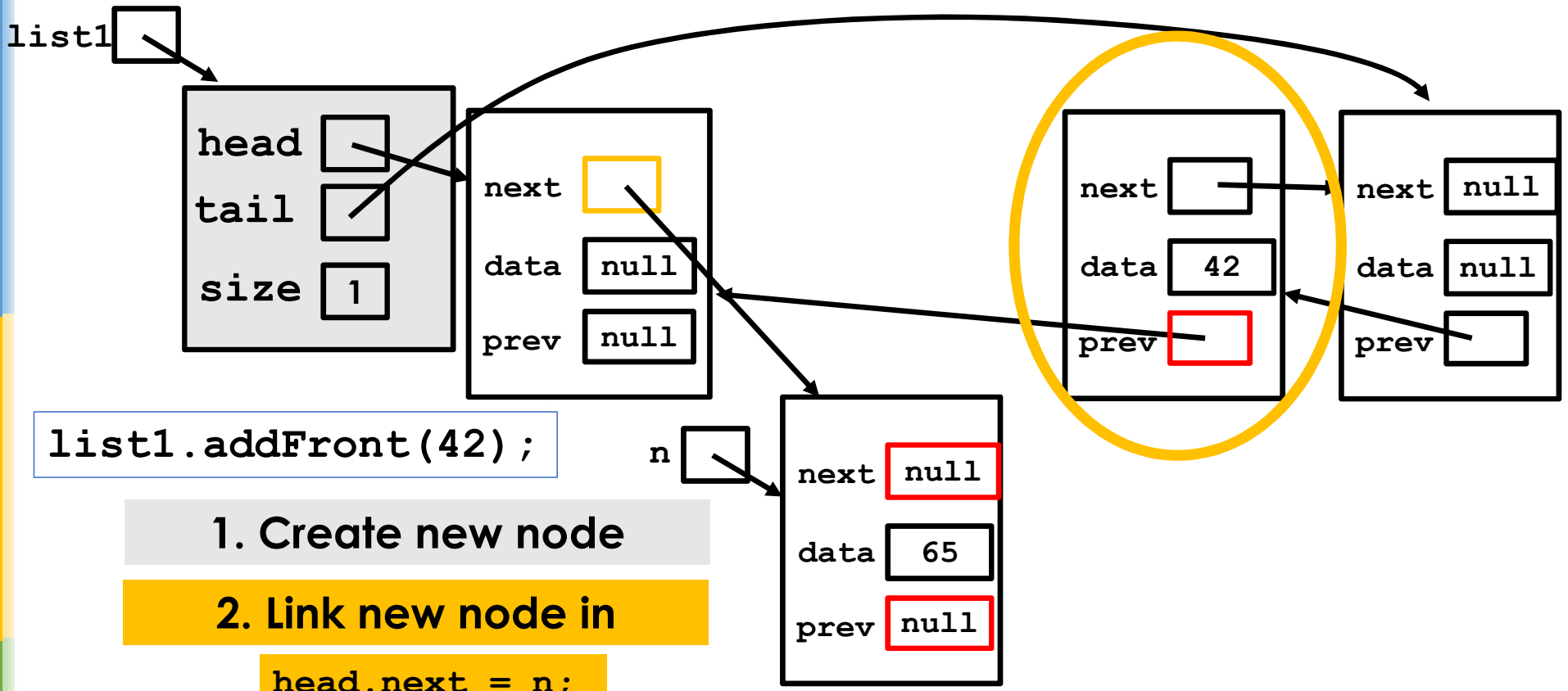



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
head.next = n;
```



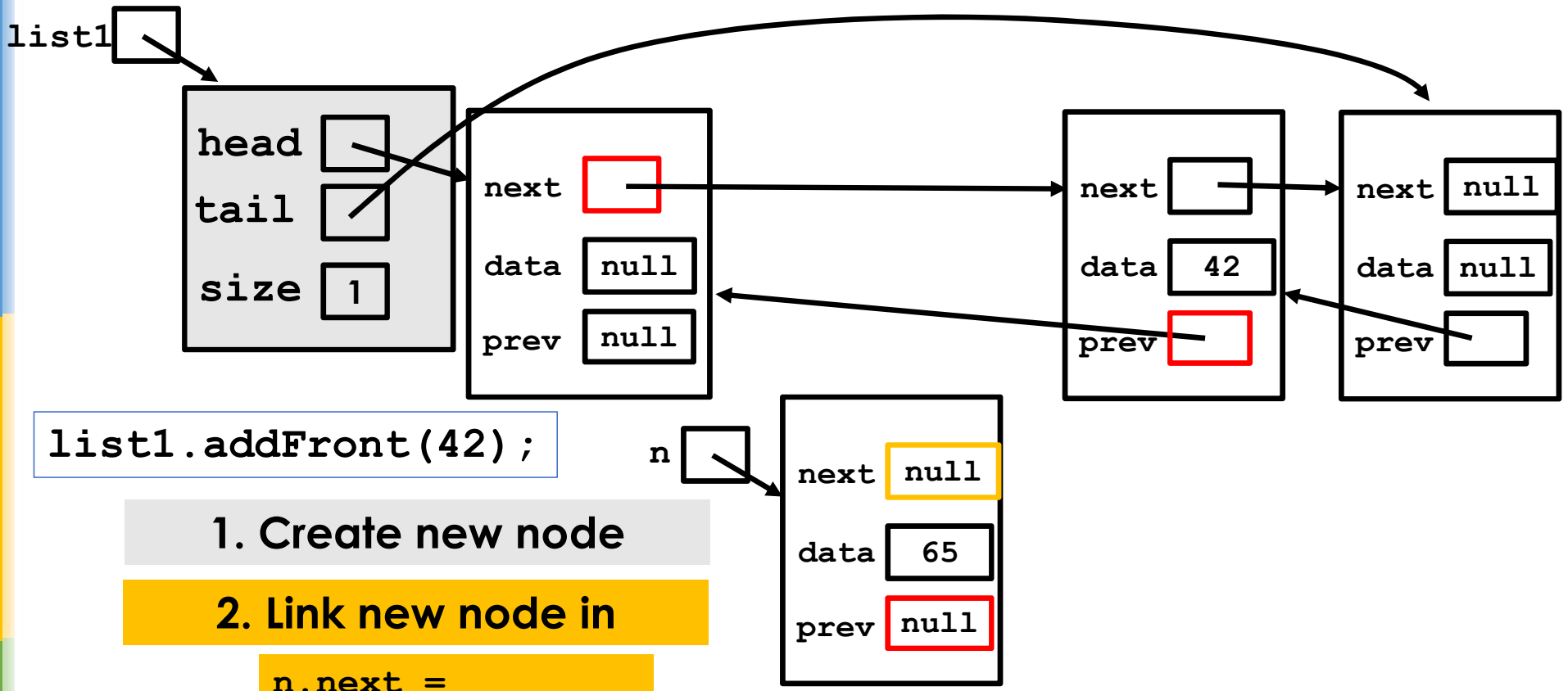

```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
head.next = n;
n.next = ???
```

Order matters!!

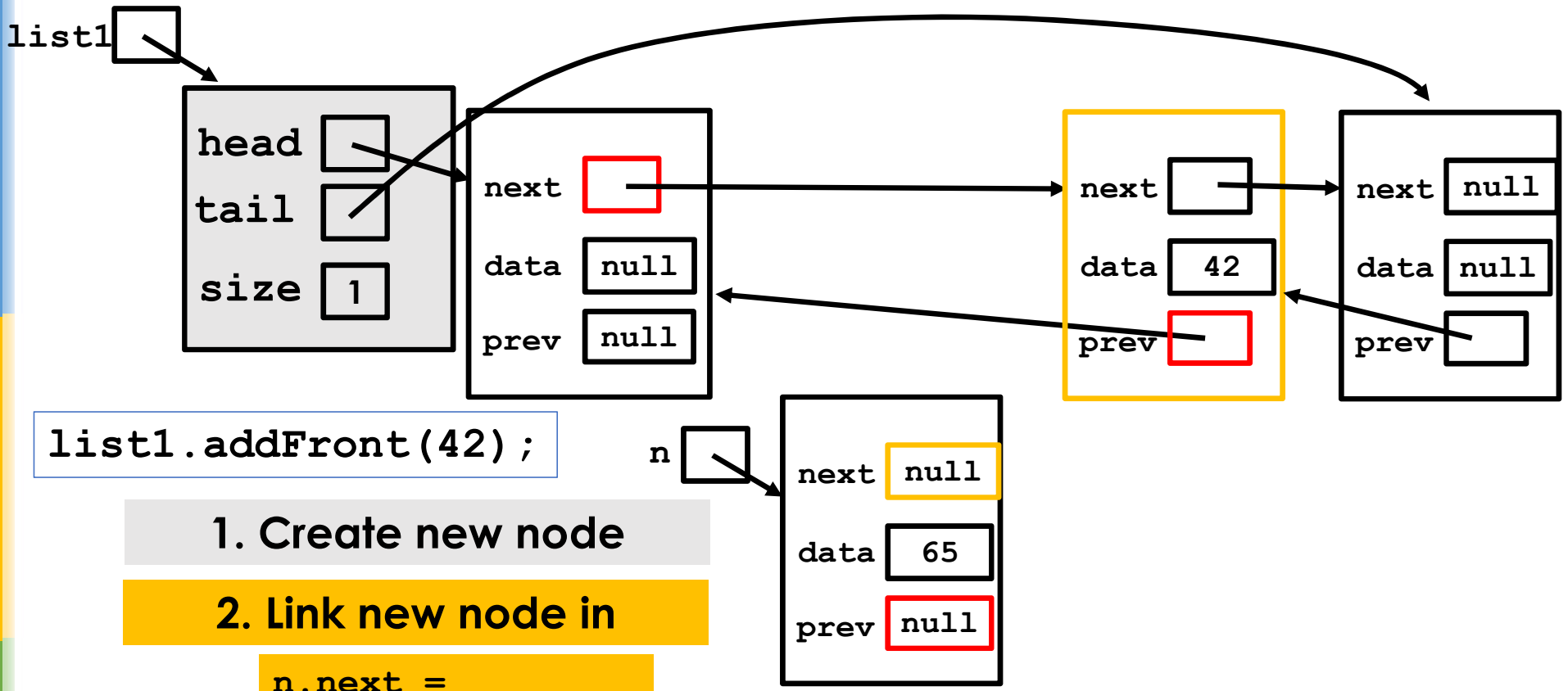



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next =
```

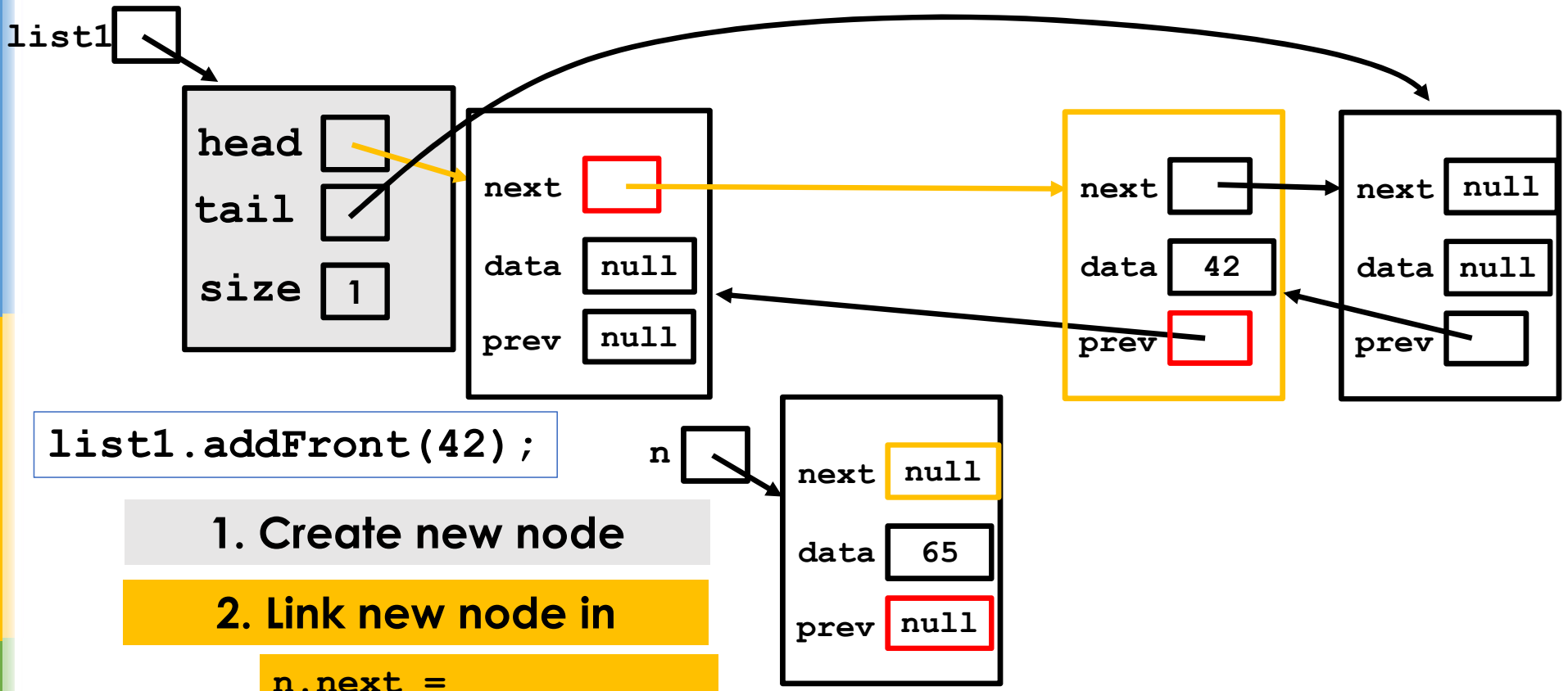



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next =
```

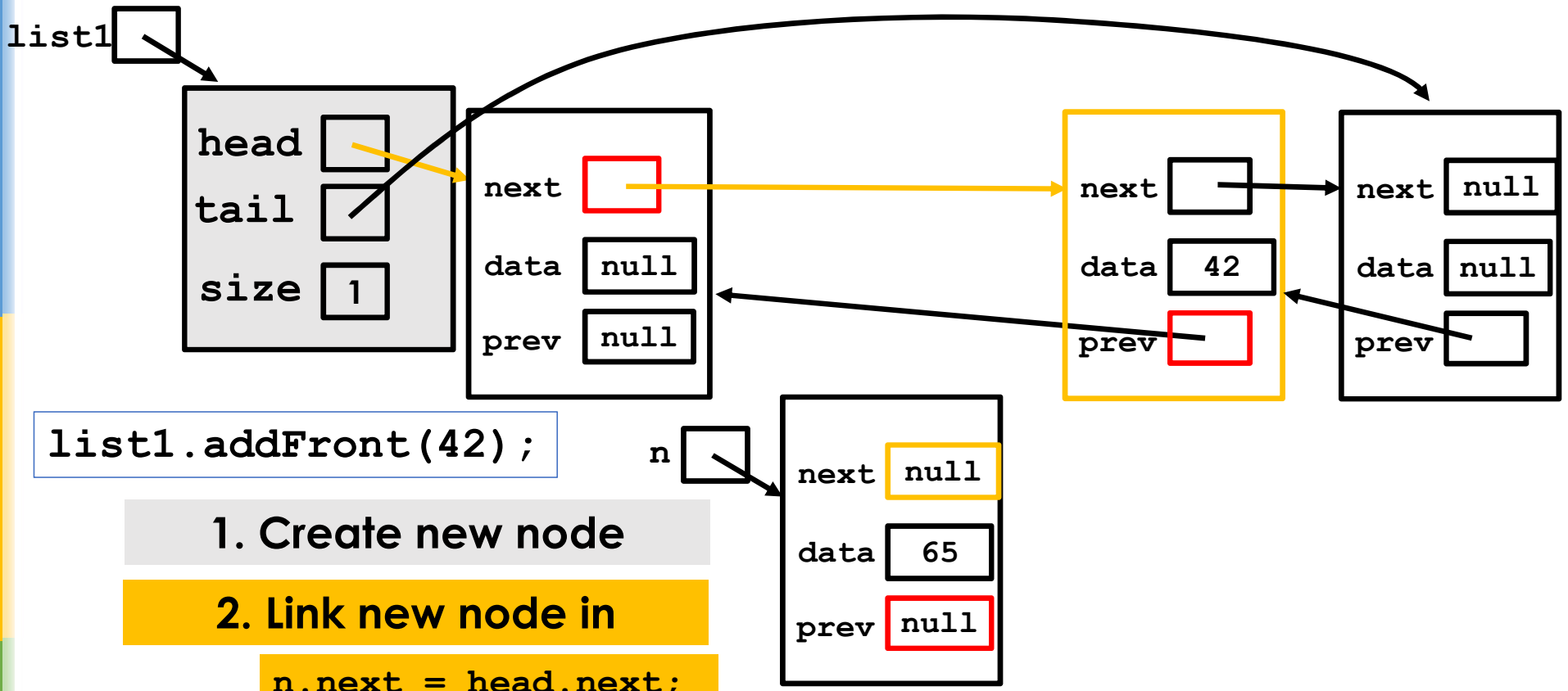



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next =
```

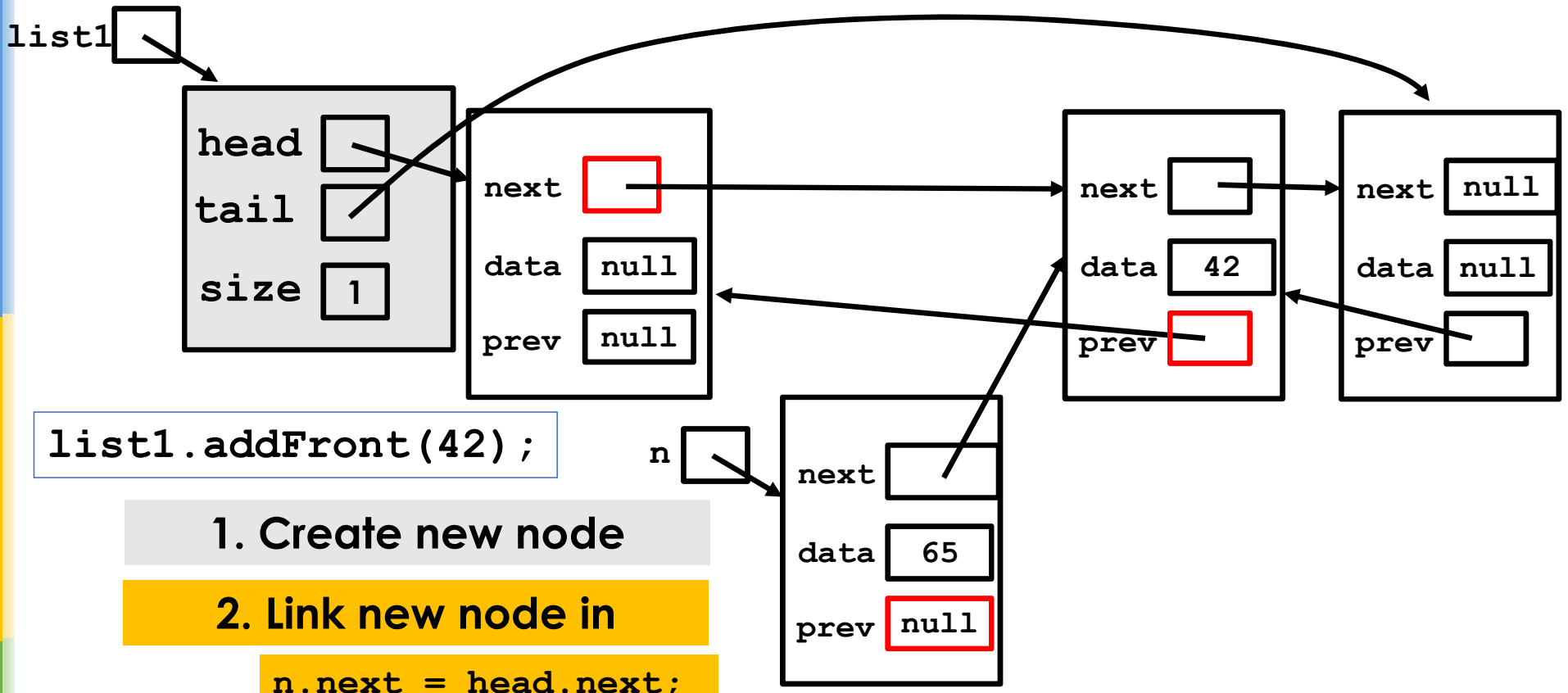



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
```

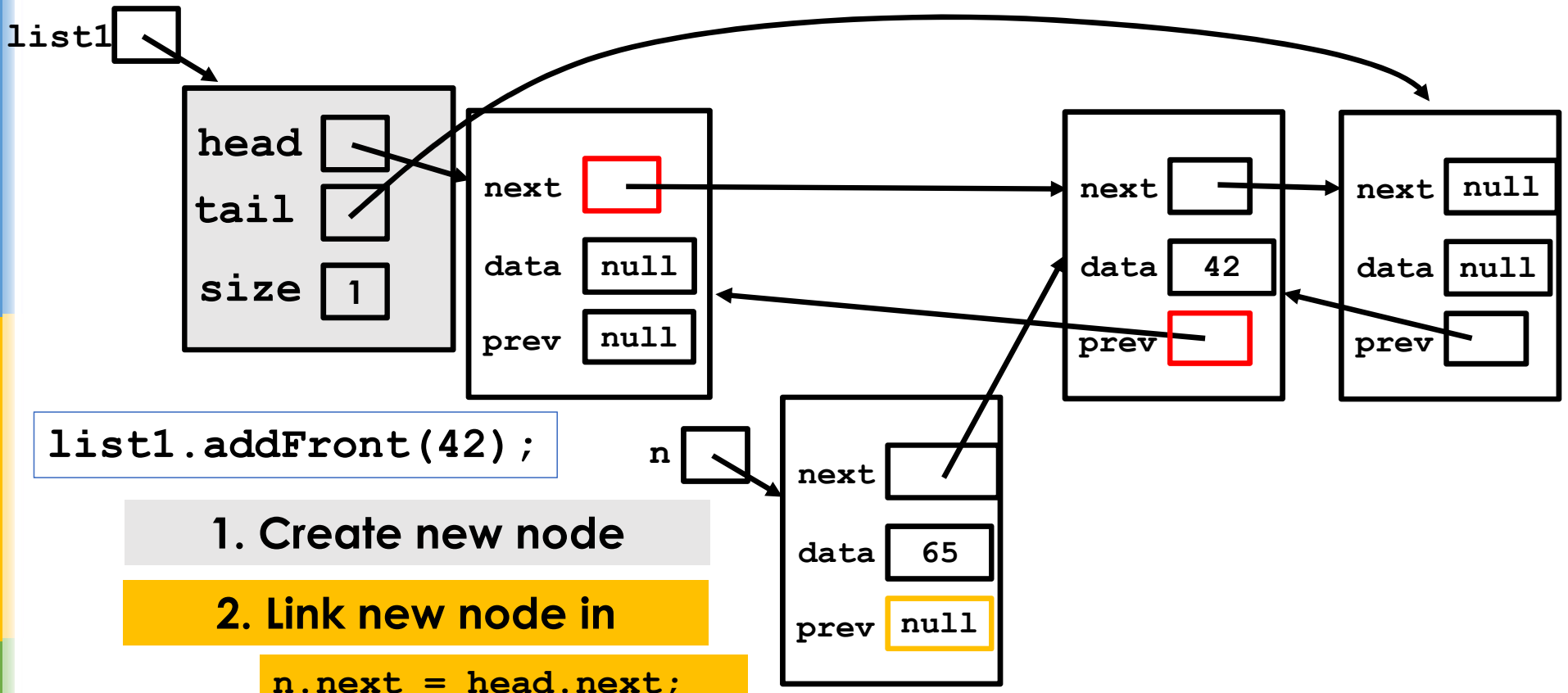



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
```

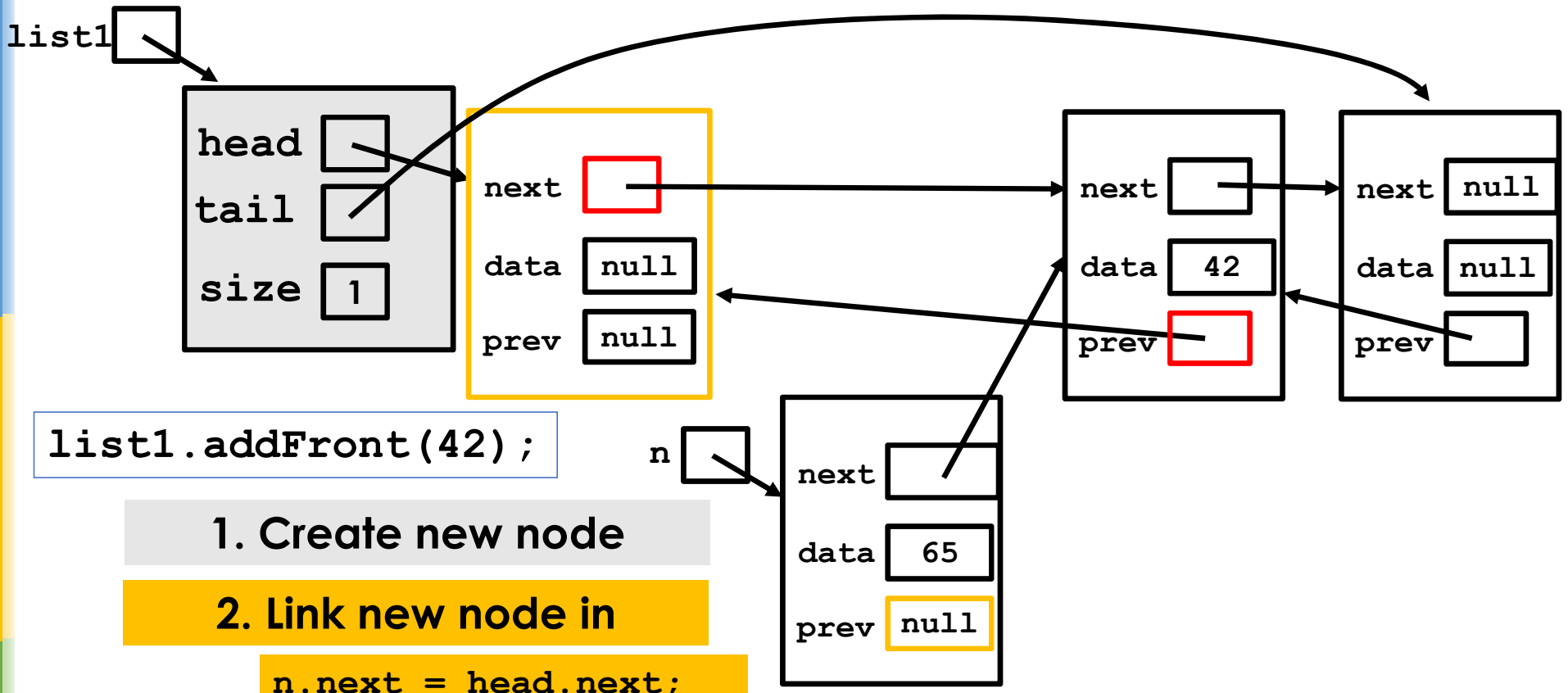



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev =
```

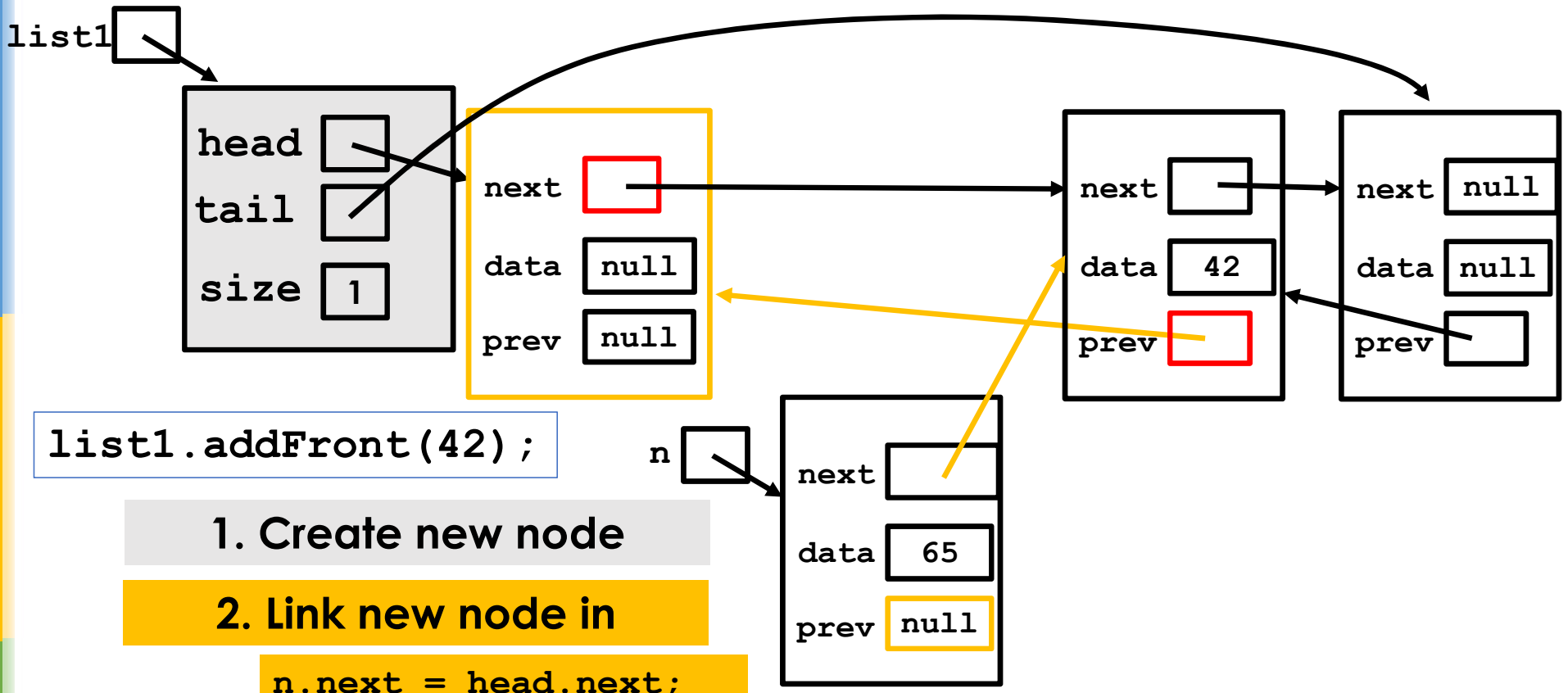



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev =
```

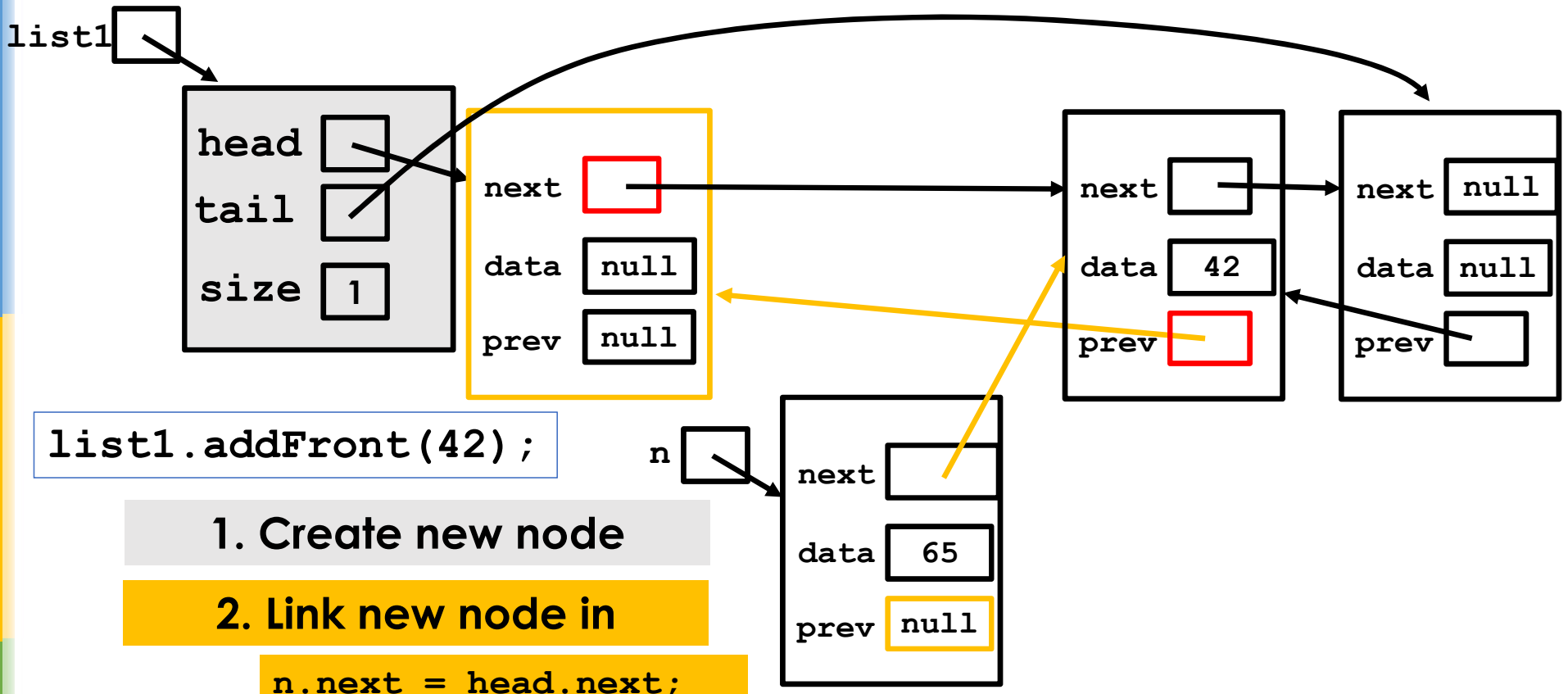



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev =
```

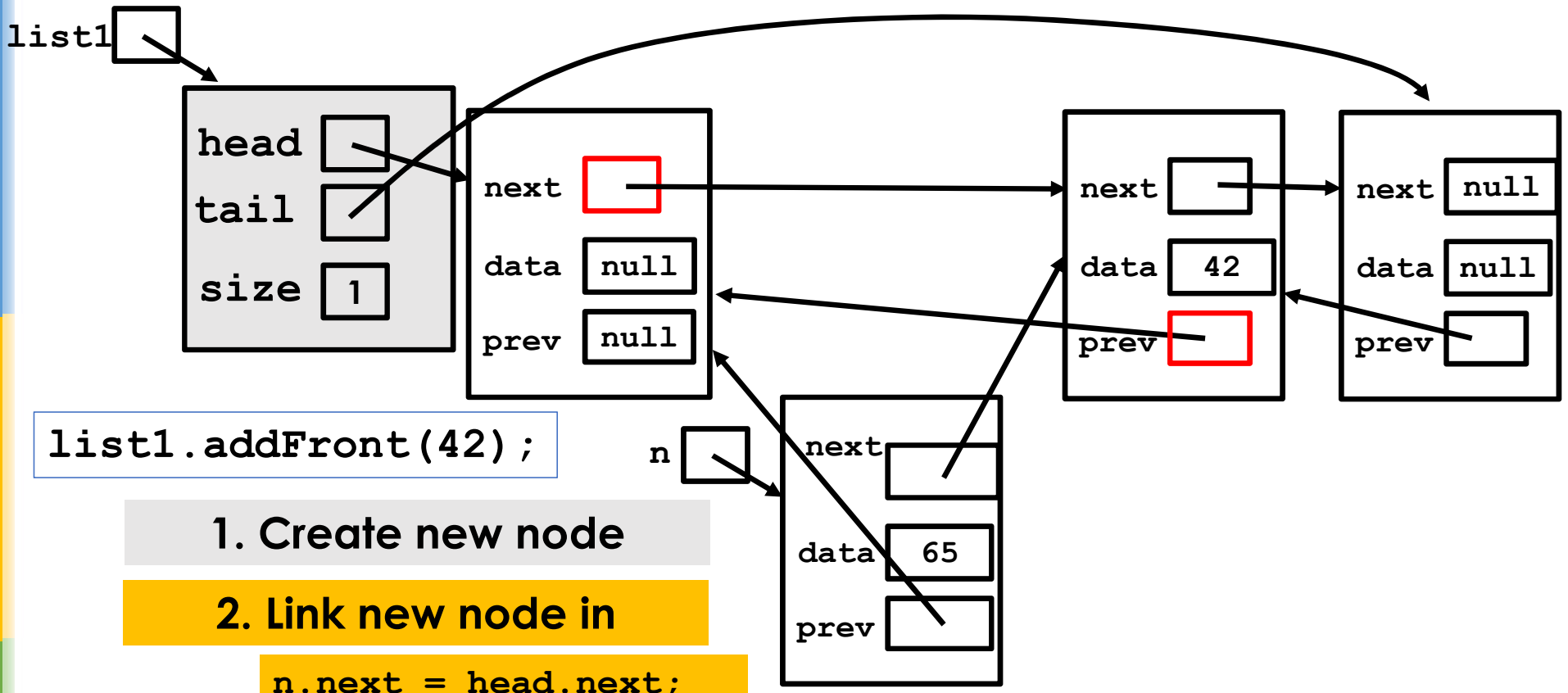



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
```

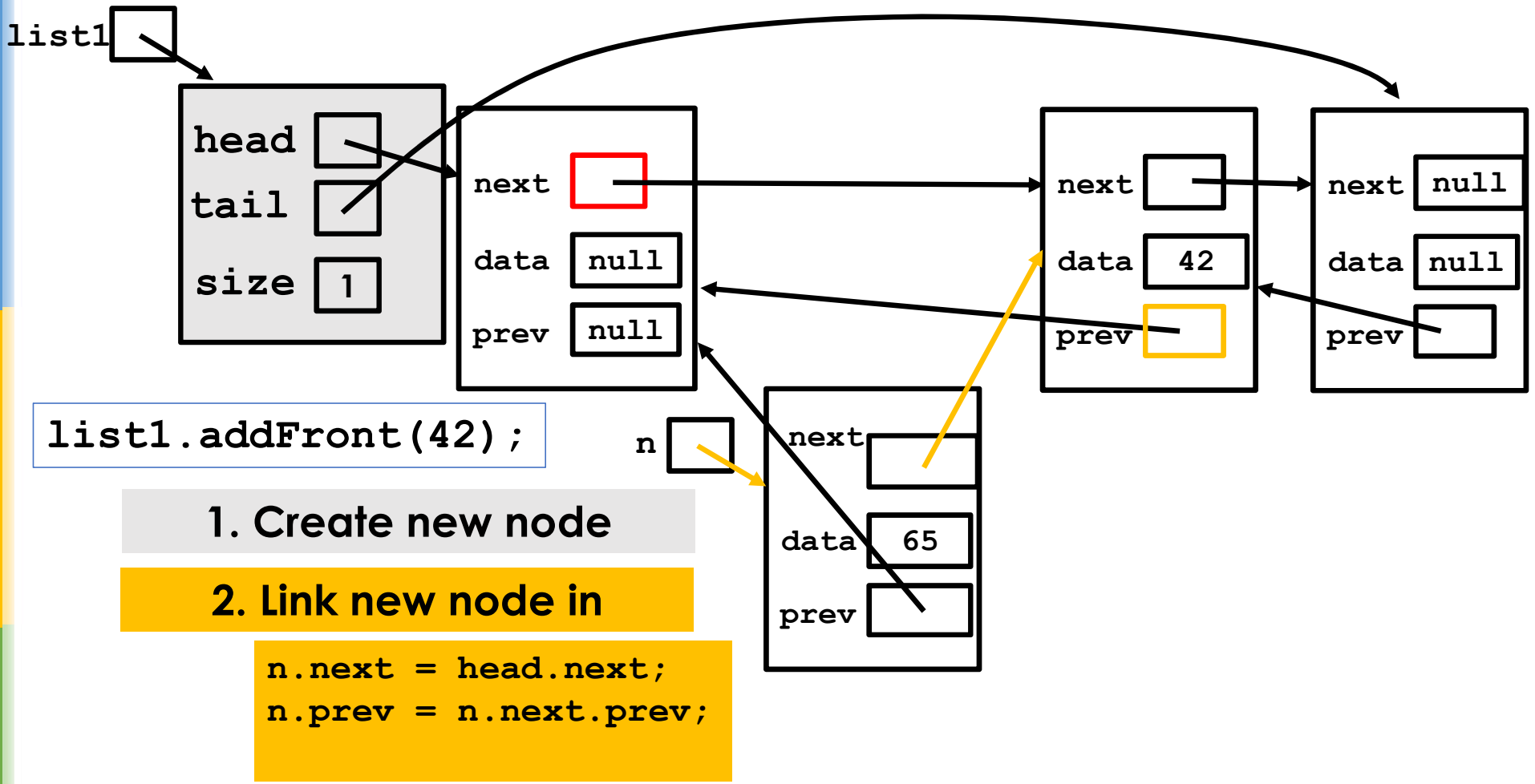



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
```

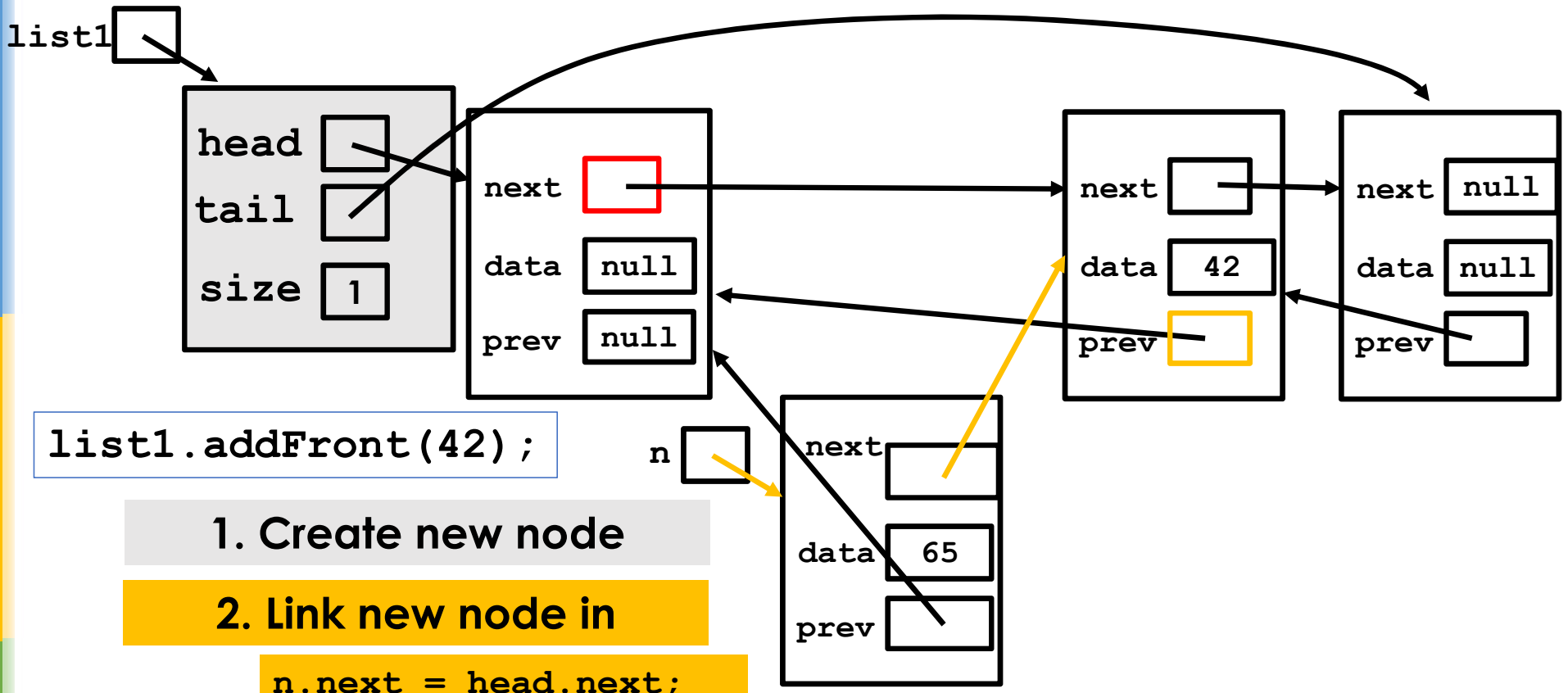



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
```

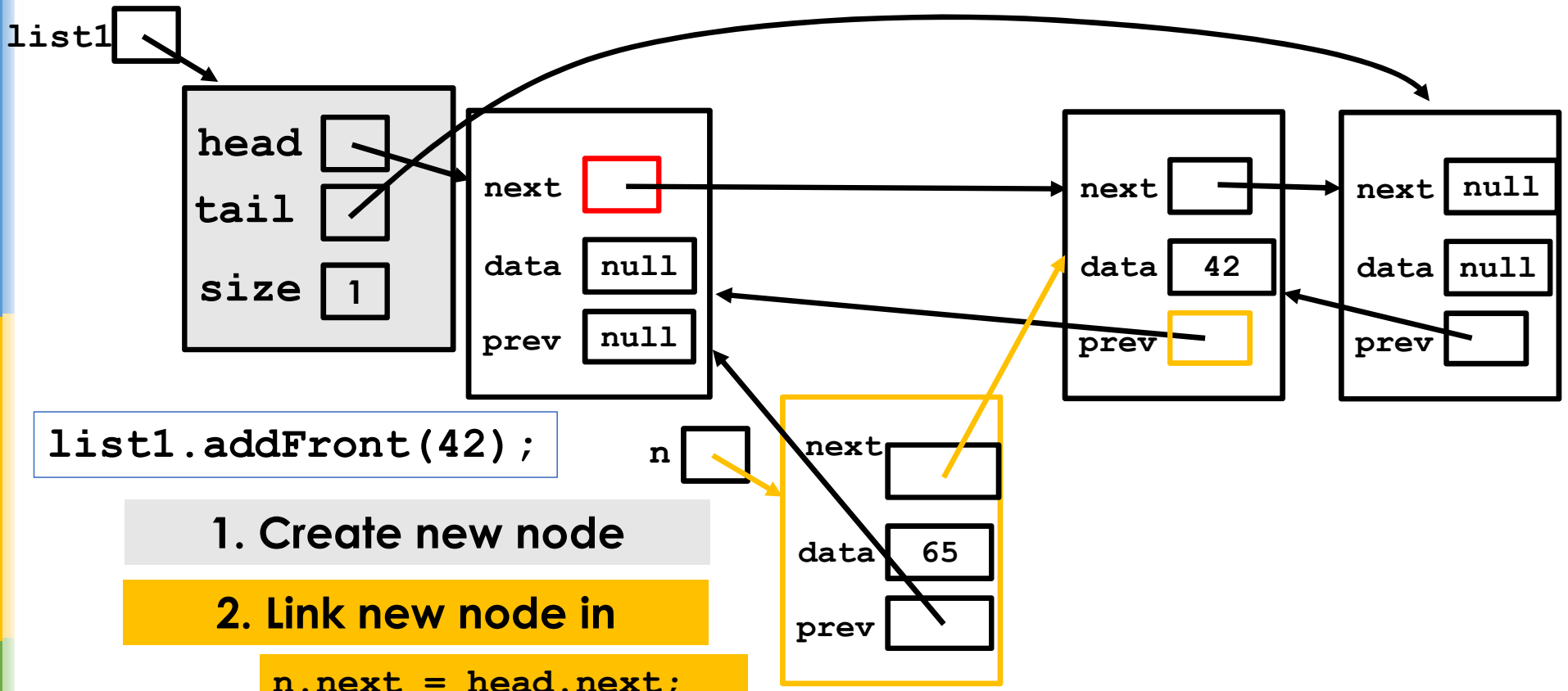



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev =
```

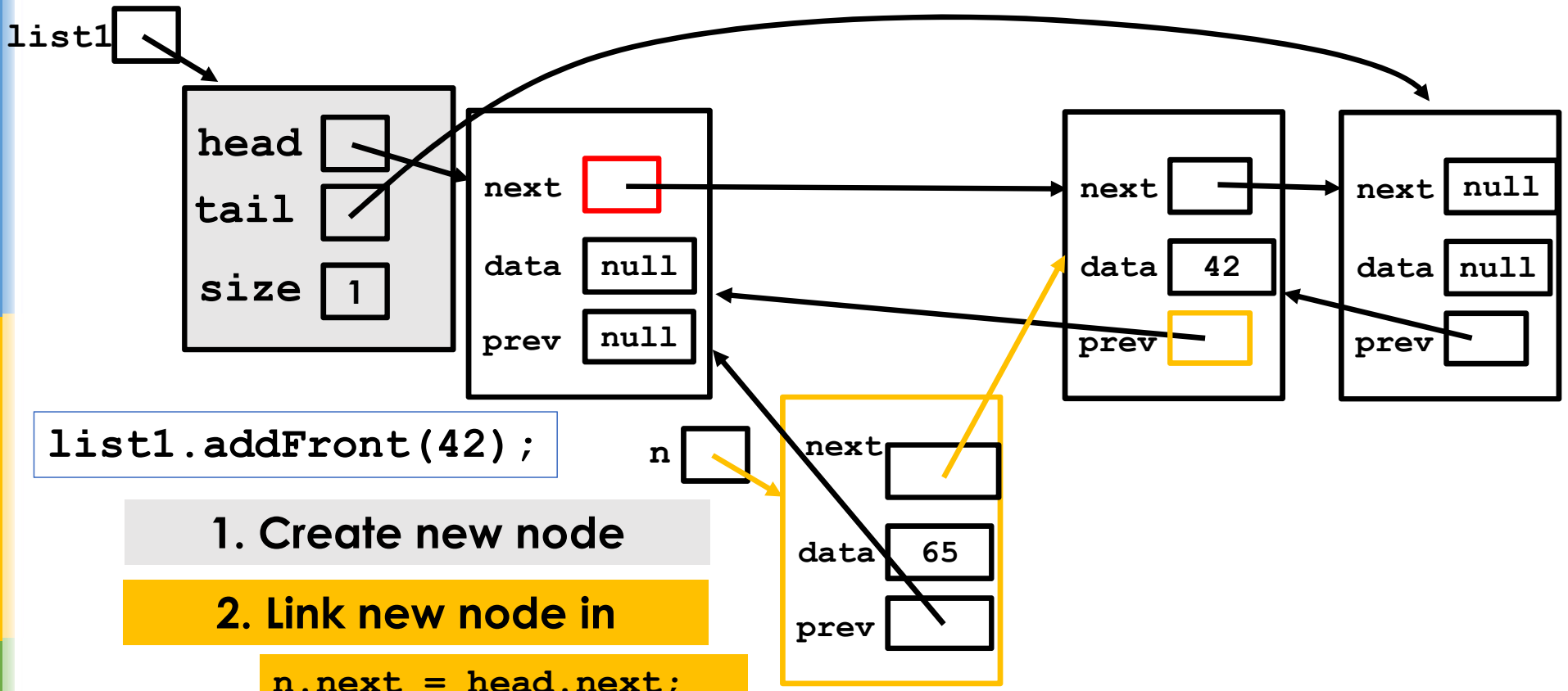



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev =
```

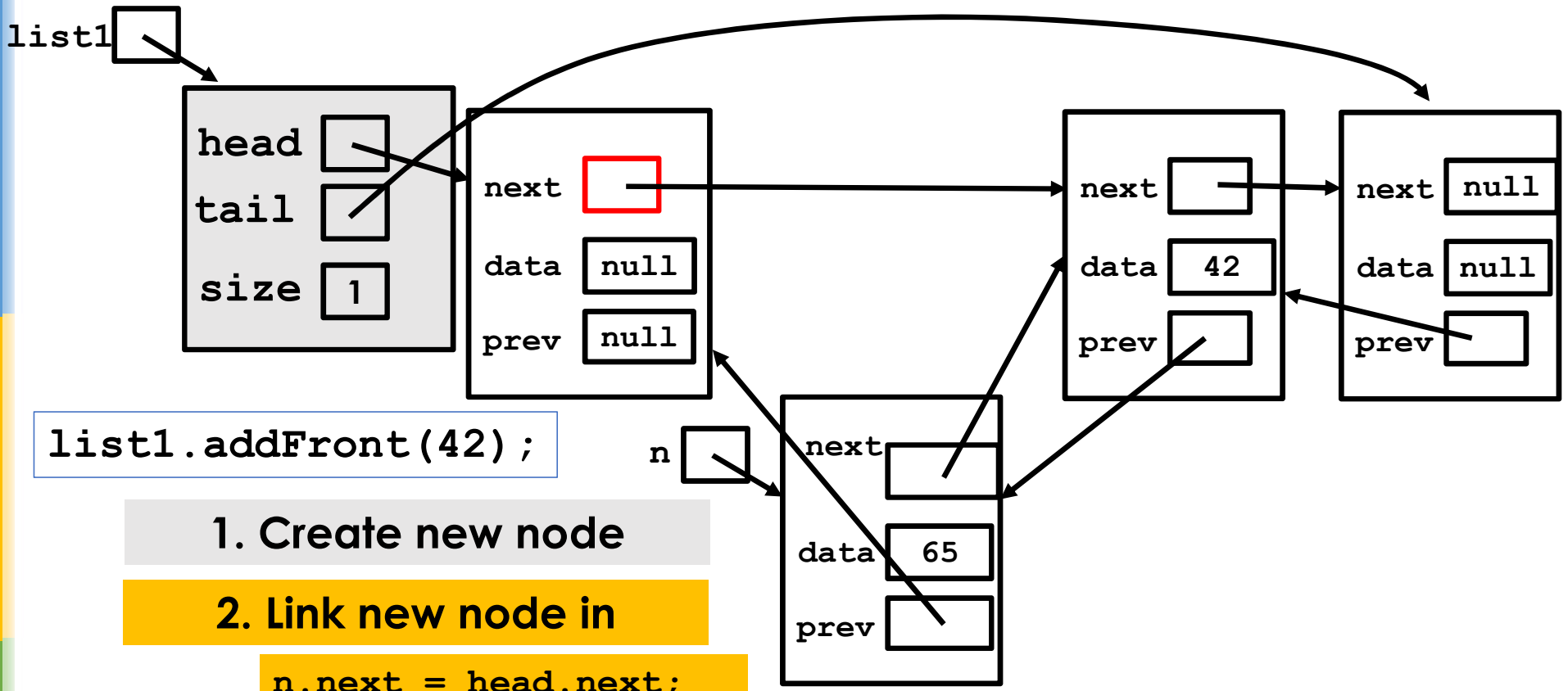



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
```

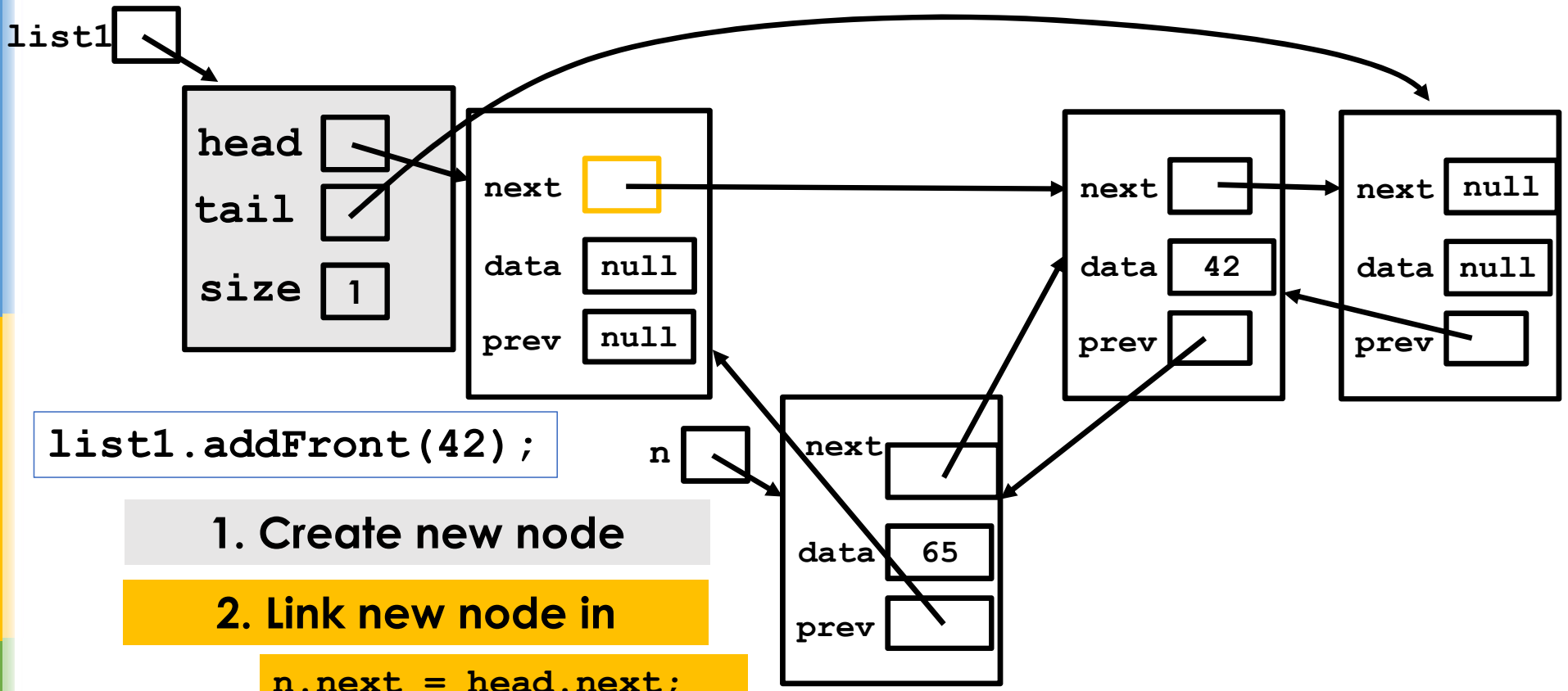



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
```

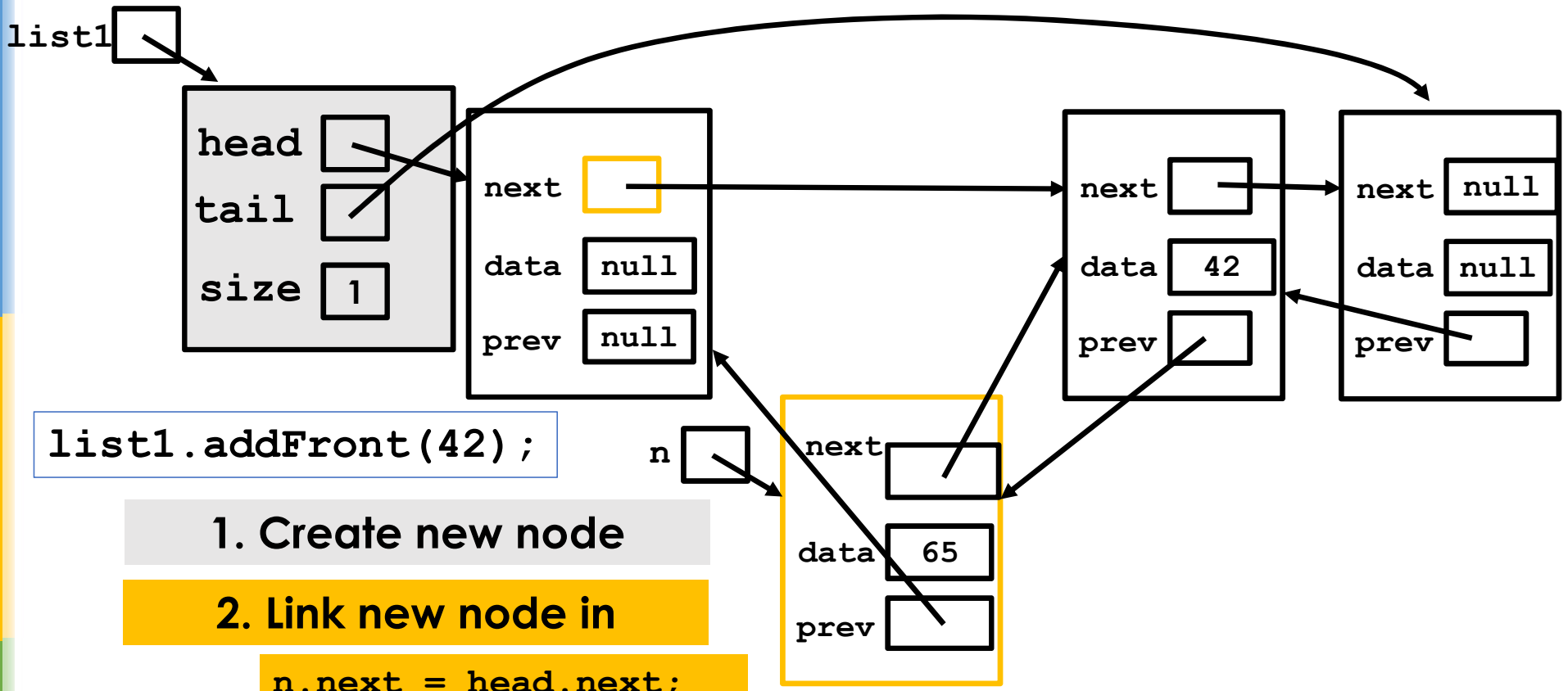



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next =
```

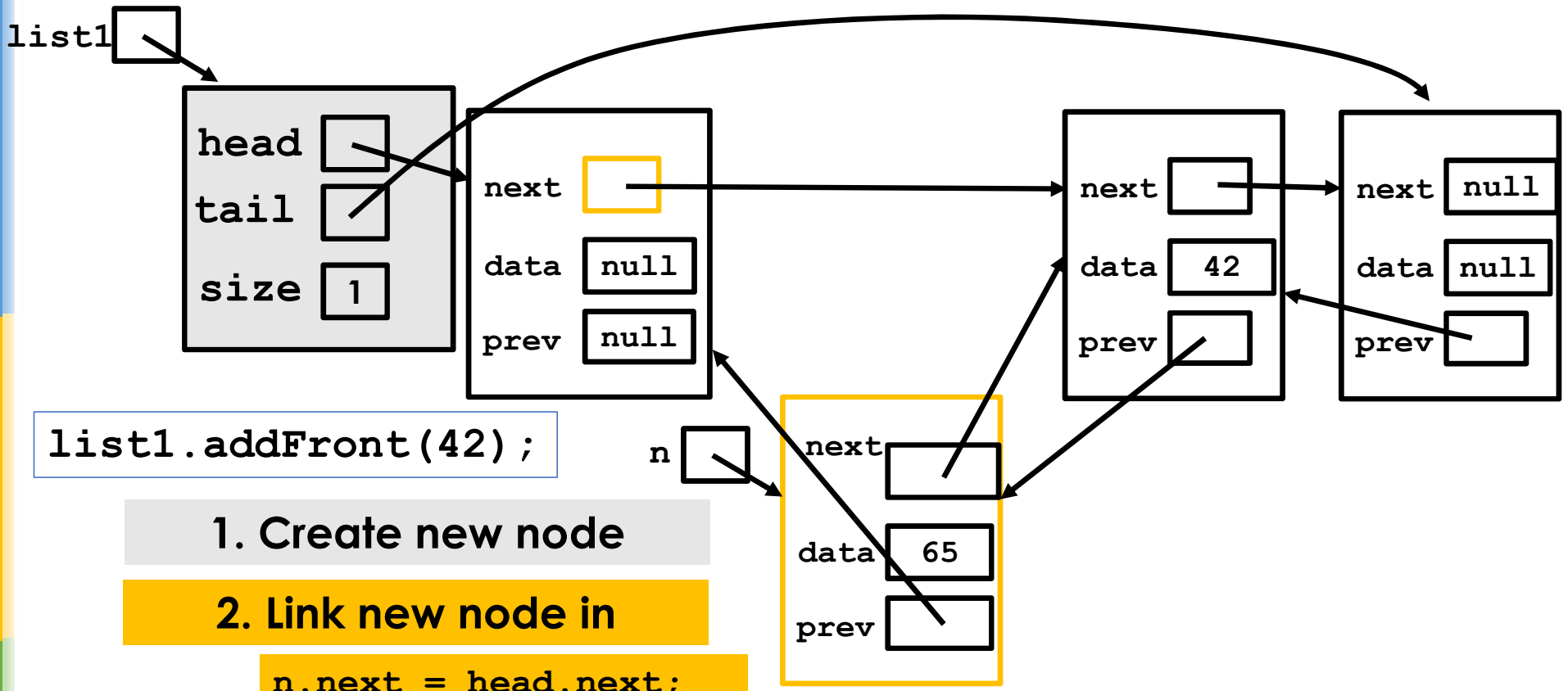



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next =
```

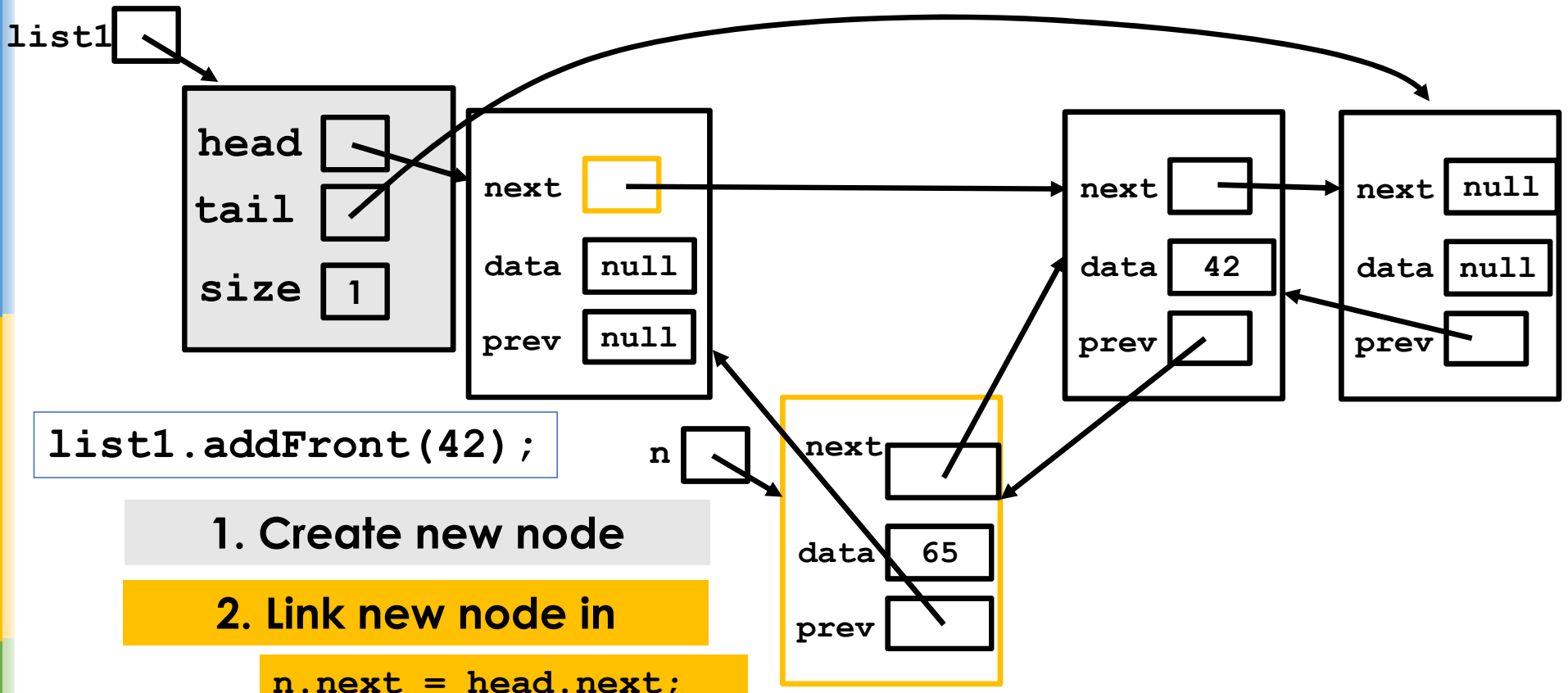



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next = n;
```

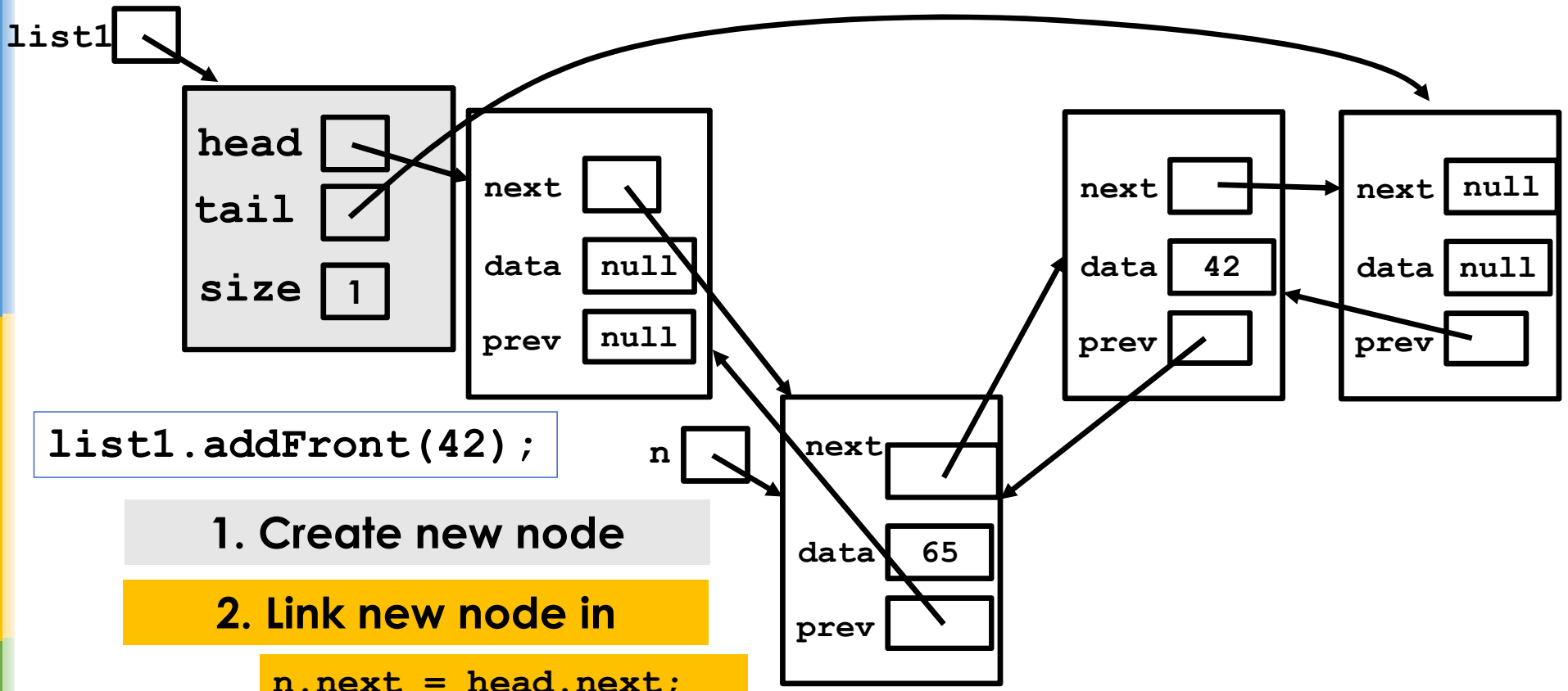


1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next = n;
```

More generally:
n.prev.next

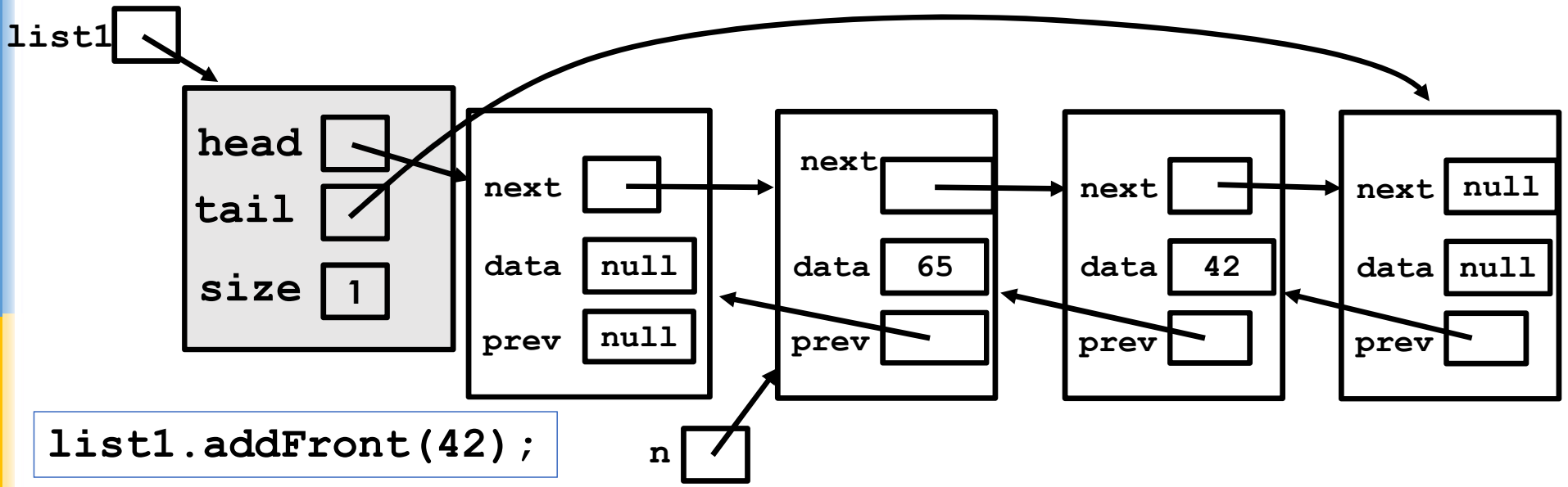



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next = n;
```

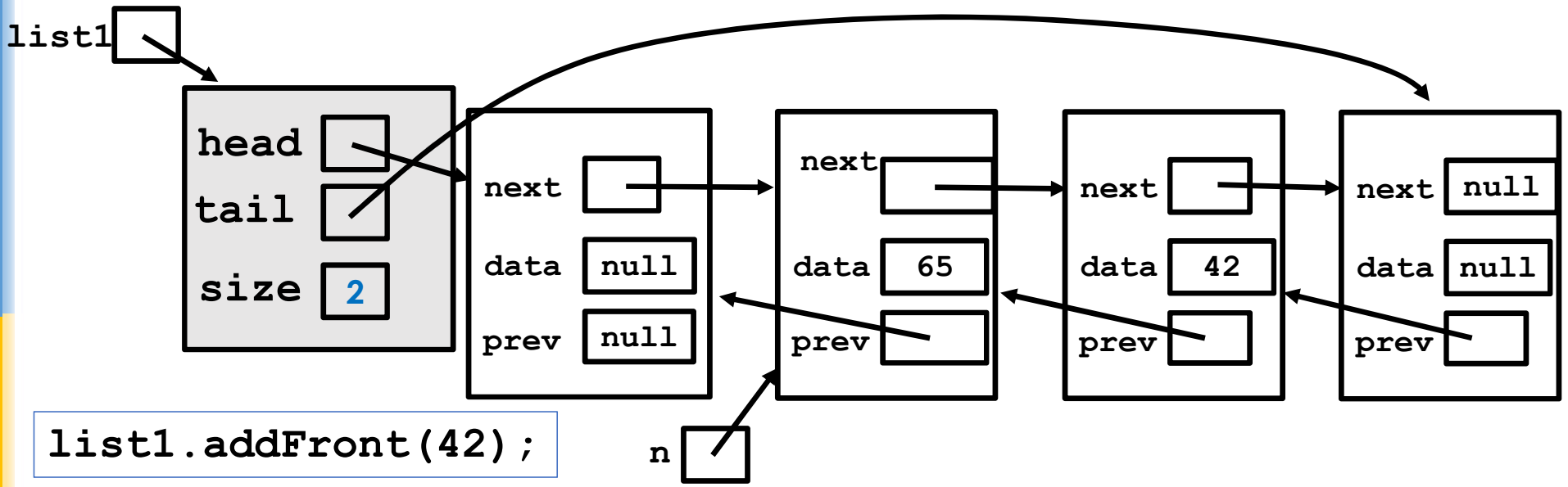



```
list1.addFront(42);
```

1. Create new node

2. Link new node in

```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next = n;
```



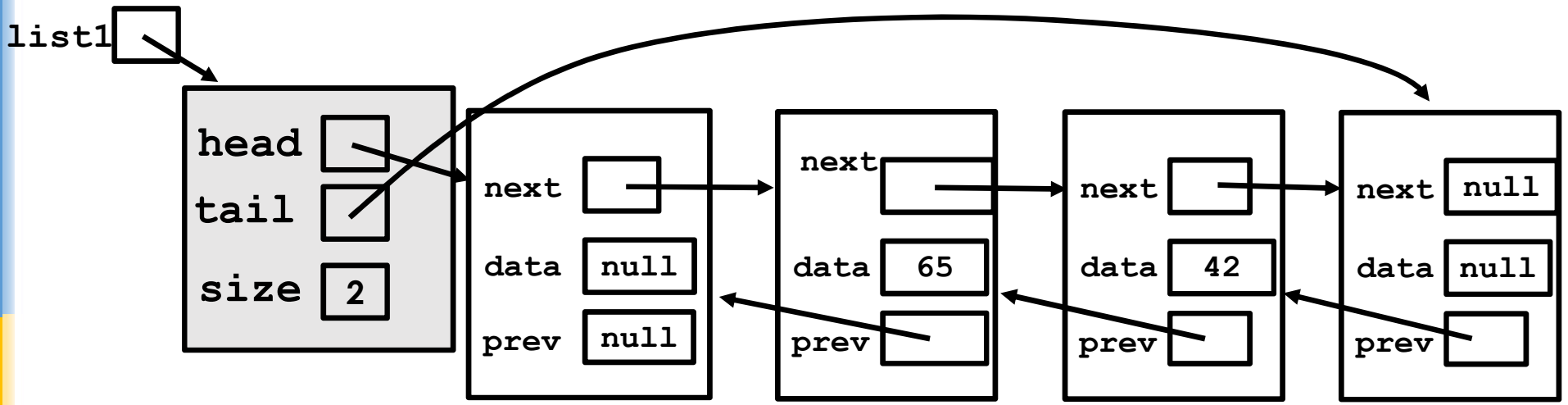

```
list1.addFront(42);
```

1. Create new node

2. Link new node in

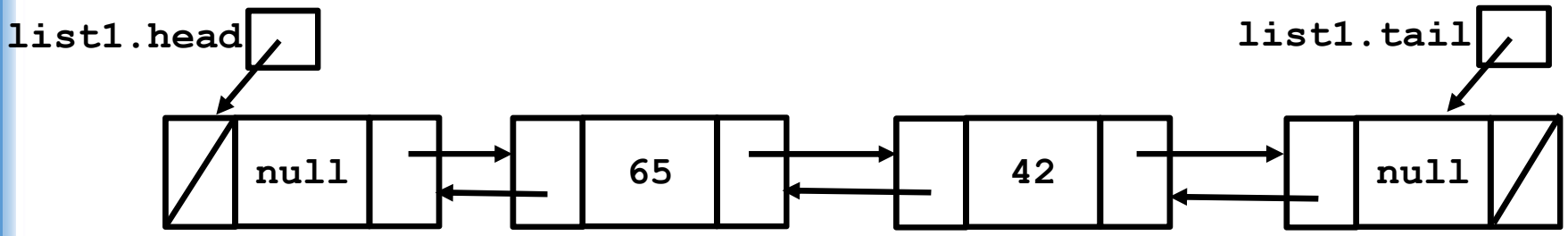
```
n.next = head.next;
n.prev = n.next.prev;
n.next.prev = n;
head.next = n;
```

3. Update Size



DRAW PICTURES!!!

(You will probably get it wrong if you don't)



DRAW PICTURES!!!

(You will probably get it wrong if you don't)