def reverse(self):
    if not self.head or not self.head.next:
        return
    node = self.head
    while node.next_node.next_node:
        node = node.next_node
    last_node = node.next_node
    node.next_node = None
    self.reverse()
    last_node.next_node = self.head
    self.head = last_node

First call to reverse()
Second call to reverse()

Third call to reverse()

Fourth call to reverse()
Back to third call to `reverse()`

```
1 • 2 [ 3 • 4 ]

self.head node last_node
```

Back to second call to `reverse()`

```
1 • 2 • 3 • 4

node self.head last_node
```

Back to first call to `reverse()`

```
1 • 2 • 3 • 4

node last_node self.head
```