NOTES ON LINKED LISTS

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```
def reverse(self):
    if not self.head or not self.head.next_node:
        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
```
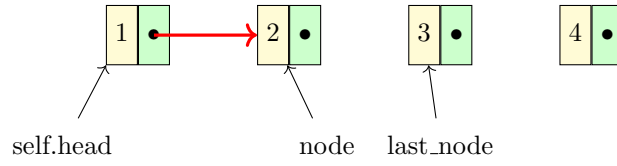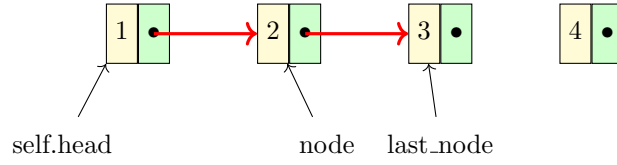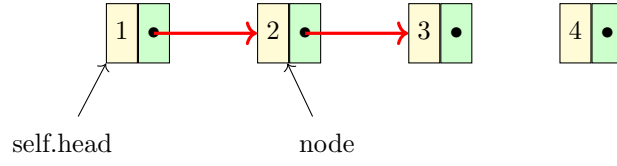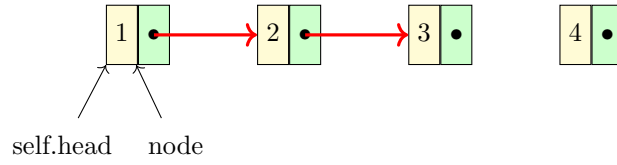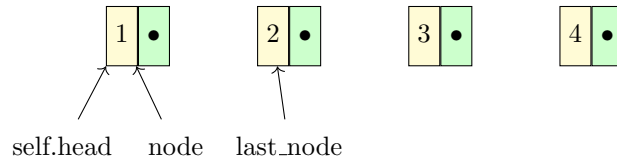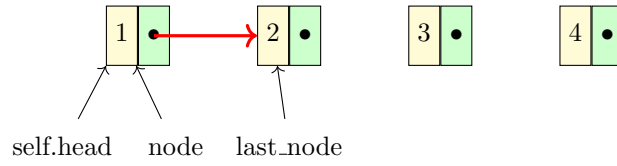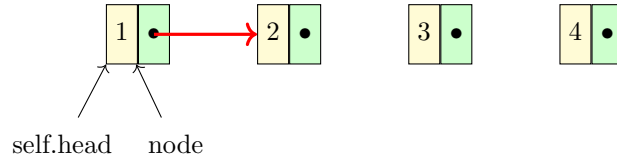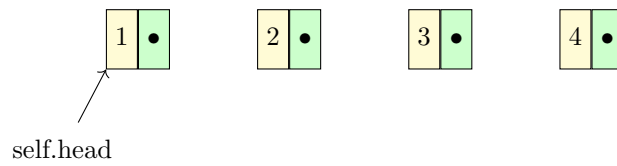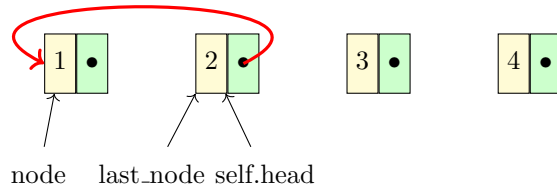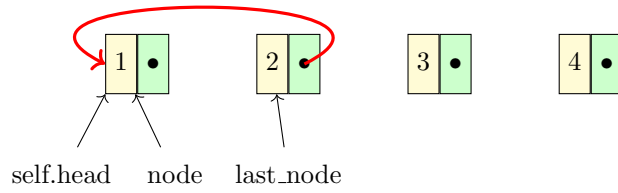
First call to `reverse()`

Second call to `reverse()`

1 • → 2 • → 3 •   4 •

self.head   node

1 • → 2 • → 3 •   4 •

self.head   node

1 • → 2 • → 3 •   4 •

self.head   node   last_node

1 • → 2 •   3 •   4 •

self.head   node   last_node

Third call to `reverse()`

1 • → 2 •   3 •   4 •

self.head   node

1 • → 2 •   3 •   4 •

self.head   node   last_node

1 •   2 •   3 •   4 •
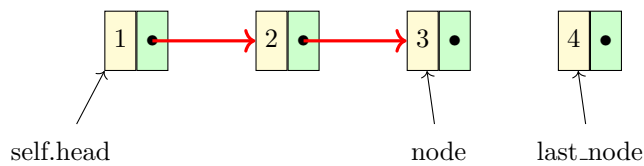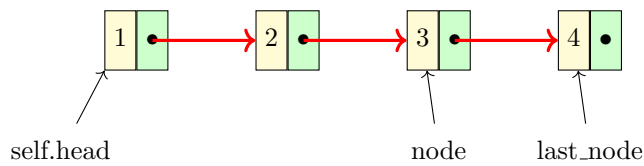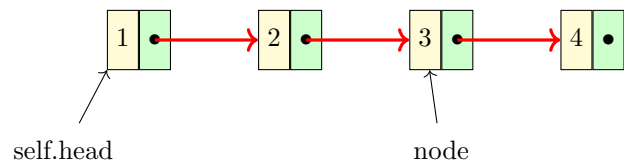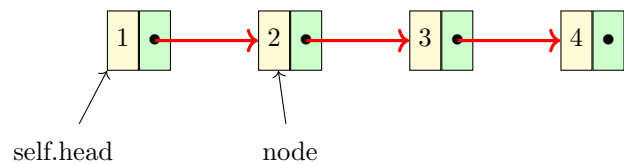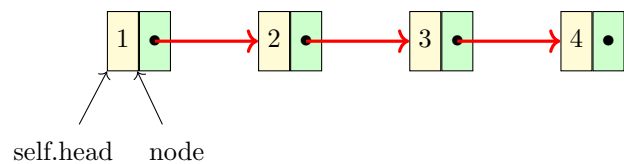
self.head   node   last_node
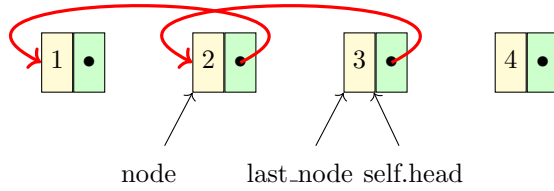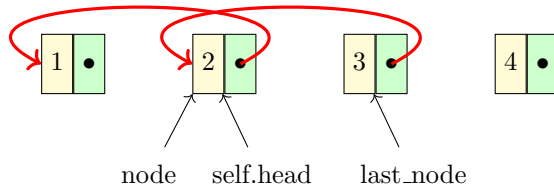
Fourth call to `reverse()`

1 •   2 •   3 •   4 •

self.head

Back to third call to `reverse()`

Back to second call to `reverse()`

Back to first call to `reverse()`