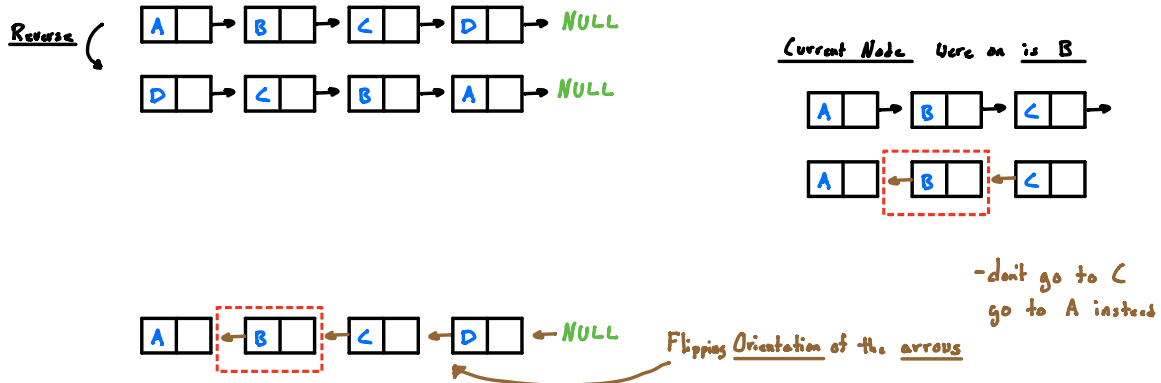


Linked List - Reverse List



- Keep track of previous and current nodes, while iterating through the list

```
def reverse_iterative(self):
```

```
    previous = None
```

Keep track of Previous and Current Node

```
    current_node = self.head
```

```
    while current_node:
```

While Current Node isn't equal to None, loop thru entire linked list

```
        next_node = current_node.next
```

```
        current_node.next = previous
```

```
        self.print_helper(previous, "Previous")
        self.print_helper(current_node, "Current Node")
        self.print_helper(next_node, "Next Node")
        print("\n")
```

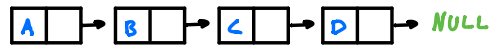
Ⓐ previous = current_node

Ⓑ current_node = next_node

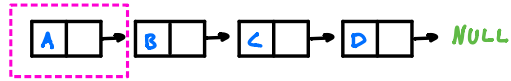
Ⓒ self.head = previous

Step-by-Step

 ~ Current Node

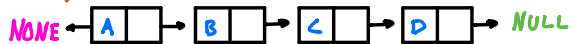


iteration 1

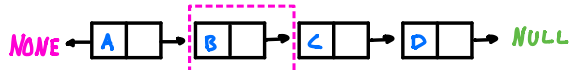


Previous : **NONE**
 Current Node: **A**
 Next Node : **B**

- (A) Previous(**NONE**) = A
- (B) Current Node = B ~ Changing node, continue loop

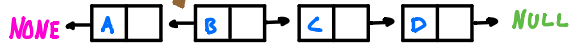


iteration 2

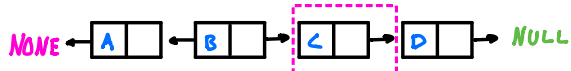


Previous : **A**
 Current Node: **B**
 Next Node : **C**

- (A) Previous(A) = B
- (B) Current Node = C ~ Changing node, continue loop



iteration 3

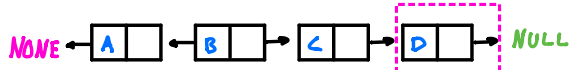


Previous : **B**
 Current Node: **C**
 Next Node : **D**

- (A) Previous(B) = C
- (B) Current Node = D ~ Changing node, continue loop



iteration 4



Previous : **C**
 Current Node: **D**
 Next Node : **NONE**

- (A) Previous(C) = D
- (B) Current Node = **NONE** ~ Exit loop



Ⓢ **NONE** ← **A** ← **B** ← **C** ← **D** ← **HEAD** ← 1st step is to change the Previous (last node) to the head node.