

Iterative procedure to reverse a singly linked list; assume that list uses a dummy header.
Internal operations in lists, written using internal structure of lists.

LI: revList = head of reversed list, cursor = first element of unprocessed part of list

(dummy) head	reversed part of list ← ← ← ← revList	cursor → → → → remaining list (unprocessed)
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```

revList ← null
cursor ← head.next
while (cursor != null) {
    tmp ← cursor.next
    cursor.next = revList
    revlist = cursor
    cursor = tmp
}
head.next = revList

```

Algorithm in pseudocode to add two numbers stored as lists:

```
static<T> T next(Iterator<T> it) { it.hasNext() ? it.next() : null; }
```

```

add(l1, l2)
    it1 = l1.iterator(); it2 = l2.iterator()
    x1 = next(it1); x2 = next(it2)
    carry = 0;
    out = new list
    while (x1 != null and x2 != null)
        sum = x1 + x2 + carry
        out.add(sum % B)
        carry = sum / B    // Integer division
        x1 = next(it1); x2 = next(it2)
    while (X1 != null)
        sum = x1 + carry
        out.add(sum % B)
        carry = sum / B    // Integer division
        x1 = next(it1)
    while (X2 != null)
        sum = x2 + carry
        out.add(sum % B)
        carry = sum / B    // Integer division
        x2 = next(it2)
    if (carry > 0) out.add(carry)
    return out

```