Reverse Linked List

Try to solve the Reverse Linked List problem.

We'll cover the following

Statement

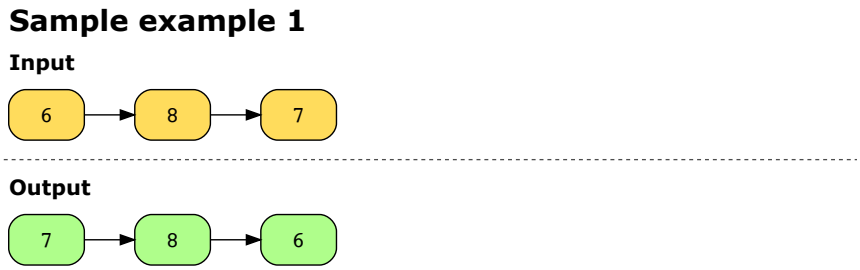
Given the head of a singly linked list, reverse the linked list and return its updated head.

Constraints:

Let `n` be the number of nodes in a linked list.

- $1 \leq$ `n` ≤ 500
- $-5000 \leq$ `Node.value` ≤ 5000

Examples



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Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

1 What is the output if the following linked list is provided as input?

$4 \rightarrow 2 \rightarrow 7 \rightarrow 8 \rightarrow 9 \rightarrow 0 \rightarrow 2$

A) $9 \rightarrow 0 \rightarrow 2 \rightarrow 8 \rightarrow 4 \rightarrow 2 \rightarrow 7$

B) $7 \rightarrow 2 \rightarrow 4 \rightarrow 8 \rightarrow 2 \rightarrow 0 \rightarrow 9$

C) $2 \rightarrow 0 \rightarrow 9 \rightarrow 8 \rightarrow 7 \rightarrow 2 \rightarrow 4$

D) $0 \rightarrow 2 \rightarrow 2 \rightarrow 4 \rightarrow 8 \rightarrow 9$

Submit Answer

Question 1 of 4
0 attempted

Reset Quiz

Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.

Drag and drop the cards to rearrange them in the correct sequence.

Initialize the `prev` and `next` pointers to NULL and set the current pointer to the head node.

Traverse the linked list until the current pointer reaches the end of the list.

Within the loop, set the `next` pointer to the next node in the list and reverse the current node's pointer to point to the previous node.

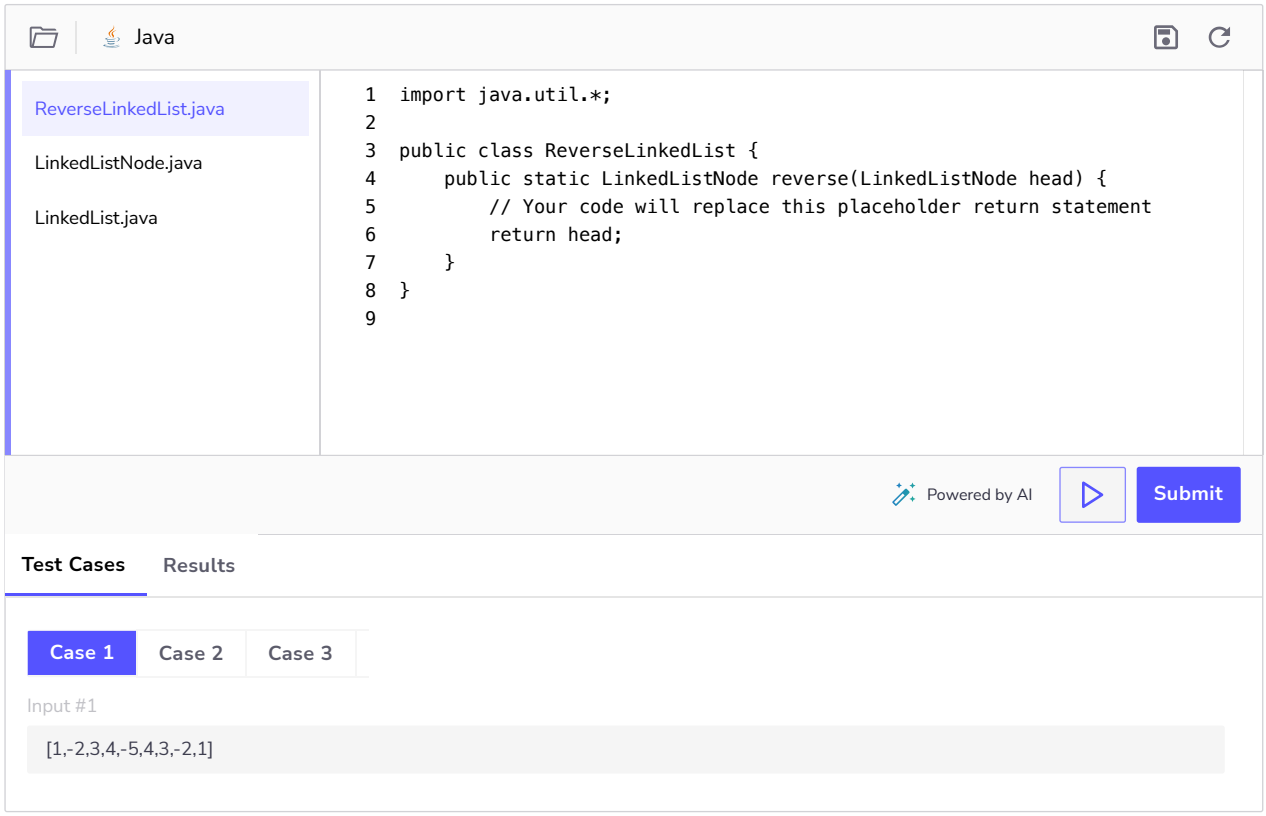
Update the `prev` and `curr` pointers.

After the loop, the `prev` pointer will point to the last node of the original linked list, so set the head pointer to

Reset | Show Solution | Submit

Try it yourself

Implement your solution in `ReverseLinkedList.java` in the following coding playground. You'll need the provided supporting code to implement your solution.



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