Swap Nodes in Pairs

Try to solve the Swap Nodes in Pairs problem.

We'll cover the following

Statement

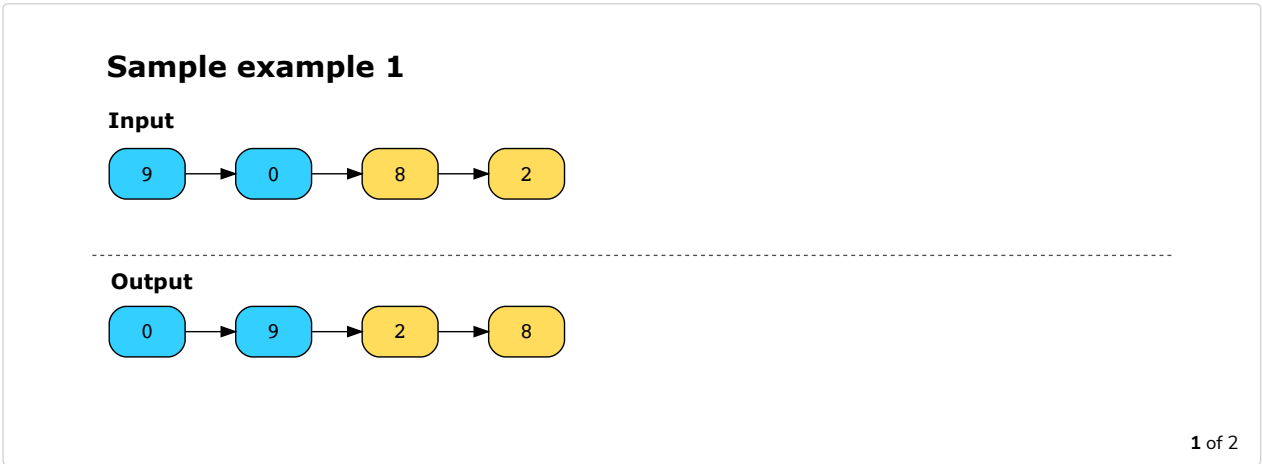
Given a singly linked list, swap every two adjacent nodes of the linked list. After the swap, return the head of the linked list.

> **Note:** Solve the problem without modifying the values in the list's nodes. In other words, only the nodes themselves can be changed.

Constraints:

- The number of nodes in the list is in the range $[0, 100]$.
- $0 \leq$ `Node.value` ≤ 100

Examples



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:

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1 Which updated linked list do we get as a result of swapping the nodes in pairs for the linked list given below?

$1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow 6$

A) $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow 6$

B) $1 \rightarrow 3 \rightarrow 2 \rightarrow 4 \rightarrow 5 \rightarrow 6$

C) $2 \rightarrow 1 \rightarrow 4 \rightarrow 3 \rightarrow 6 \rightarrow 5$

D) $6 \rightarrow 5 \rightarrow 4 \rightarrow 3 \rightarrow 2 \rightarrow 1$

Submit Answer

Question 1 of 2
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.

> **Note:** As an additional challenge, we have intentionally hidden the solution to this puzzle.

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

Reconnect the swapped pair of nodes with the rest of the linked list.

Swap the two nodes.

Check to make sure that there are at least 2 nodes in the linked list.

Repeat the process until only one node is left or we reach the end of the linked list.

Reset Submit

Try it yourself

Implement your solution in `SwapNodes.java` in the following coding playground. We have provided useful code templates in the other files that you may build on to solve this problem.

logic of the solved puzzle into a coded solution.

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Solution: Reverse Nod...

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Two Heaps: Introducti...

Mark as Completed