

Hacker Rank Challenge:

The image shows a HackerRank challenge page for "Reverse a doubly linked list". The page is divided into several sections: Problem, Function Description, Input Format, Constraints, and a code editor. The problem description states: "Given the pointer to the head node of a doubly linked list, reverse the order of the nodes in place. That is, change the next and prev pointers of the nodes so that the direction of the list is reversed. Return a reference to the head node of the reversed list." The function description says: "Complete the reverse function in the editor below. reverse has the following parameter(s): DoublyLinkedListNode head: a reference to the head of a DoublyLinkedList". The input format states: "The first line contains an integer t , the number of test cases. Each test case is of the following format: The first line contains an integer n , the number of elements in the linked list. The next n lines contain an integer each denoting an element of the linked list." The constraints are: $1 \leq t \leq 10$, $0 \leq n \leq 1000$, and $0 < DoublyLinkedListNode.data < 1000$. The code editor shows a C++ solution for the reverse function. The user's profile is visible on the right, showing the name "Sakshi B R" and email "sakshibr.cs22@bmsce.ac.in". The bottom section shows the test cases and the output.

Problem

This challenge is part of a tutorial track by MyCodeSchool

Given the pointer to the head node of a doubly linked list, reverse the order of the nodes in place. That is, change the next and prev pointers of the nodes so that the direction of the list is reversed. Return a reference to the head node of the reversed list.

Note: The head node might be NULL to indicate that the list is empty.

Function Description

Complete the reverse function in the editor below.

reverse has the following parameter(s):

- DoublyLinkedListNode head: a reference to the head of a DoublyLinkedList

Returns

- DoublyLinkedListNode: a reference to the head of the reversed list

Input Format

The first line contains an integer t , the number of test cases.

Each test case is of the following format:

- The first line contains an integer n , the number of elements in the linked list.
- The next n lines contain an integer each denoting an element of the linked list.

Constraints

- $1 \leq t \leq 10$
- $0 \leq n \leq 1000$
- $0 < DoublyLinkedListNode.data < 1000$

```
84 * DoublyLinkedListNode* prev;
85 * };
86 *
87 */
88 DoublyLinkedListNode* reverse(DoublyLinkedListNode* head) {
89     DoublyLinkedListNode* temp = head;
90     DoublyLinkedListNode* current = temp;
91     DoublyLinkedListNode* prev = NULL;
92     DoublyLinkedListNode* next = NULL;
93     while (current != NULL)
94     {
95         next = current->next;
96         current->next = prev;
97         current->prev = next; // Add this line
98         prev = current;
99         current = next;
100     }
101     return prev;
102 }
103
104
105
106 int main()
107 {
108     FILE* fptr = fopen(getenv("OUTPUT_PATH"), "w");
```

Line: 103 Col: 1

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Congratulations!

You have passed the sample test cases. Click the submit button to run your code on all test cases.

Sample Test case 0

Input (stdin)

```
1 1
2 4
3 1
4 2
5 3
6 4
```

Your Output (stdout)

```
1 4 3 2 1
```

Expected Output

```
1 4 3 2 1
```

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Problem

Submissions

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Discussions

This challenge is part of a tutorial track by [MyCodeSchool](#)

Given the pointer to the head node of a doubly linked list, reverse the order of the nodes in place. That is, change the next and prev pointers of the nodes so that the direction of the list is reversed. Return a reference to the head node of the reversed list.

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- $1 \leq t \leq 10$
- $0 \leq n \leq 1000$
- $0 \leq \text{DoublyLinkedListNode.data} \leq 1000$

98

99

prev = current;
current = next;

Upload Code as File

Test against custom input

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You have passed the sample test cases. Click the submit button to run your code.

Sample Test case 0

Sample Test case 1

Sample Test case 2

Input (stdin)

1 1
2 3
3 2
4 3
5 4

Your Output (stdout)

1 4 3 2

Expected Output

1 4 3 2

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Sakshi B R

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Sample Test case 0

Sample Test case 1

Sample Test case 2

Input (stdin)

1 1
2 5
3 17
4 20
5 23
6 35
7 47

Your Output (stdout)

1 47 35 23 20 17

Expected Output

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