

Insert a node at a specific position in a linked list \diamondsuit

Leaderboard

Your Insert a node at a specific position in a linked list submission got 5.00 points.

Share

Tweet

X

Try the next challenge

Editorial A

This challenge is part of a tutorial track by MyCodeSchool and is accompanied by a video lesson.

Submissions

Given the pointer to the head node of a linked list and an integer to insert at a certain position, create a new node with the given integer as its **data** attribute, insert this node at the desired position and return the head node.

A position of 0 indicates head, a position of 1 indicates one node away from the head and so on. The head pointer given may be null meaning that the initial list is empty.

Example

head refers to the first node in the list 1
ightarrow 2
ightarrow 3

data = 4

position = 2

Problem

Insert a node at position 2 with data=4. The new list is 1 o 2 o 4 o 3

Function Description Complete the function insertNodeAtPosition in the editor below. It must return a reference to the head node of your finished list.

insertNodeAtPosition has the following parameters:

- head: a SinglyLinkedListNode pointer to the head of the list
- data: an integer value to insert as data in your new node
- position: an integer position to insert the new node, zero based indexing

Returns

SinglyLinkedListNode pointer: a reference to the head of the revised list

Input Format

The first line contains an integer $m{n}$, the number of elements in the linked list.

Each of the next ${\pmb n}$ lines contains an integer SinglyLinkedListNode[i].data.

The next line contains an integer **data**, the data of the node that is to be inserted.

The last line contains an integer position

Constraints

- 1 < n < 1000
- $1 \leq SinglyLinkedListNode[i]$. $data \leq 1000$, where SinglyLinkedListNode[i] is the i^{th} element of the linked list.
- $0 \leq position \leq n$

Sample Input

3

16

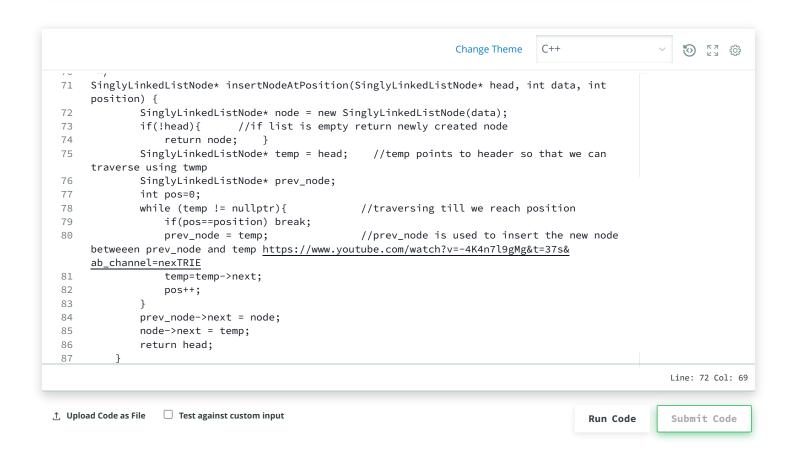
13

7

2



Sample Output 16 13 1 7 **Explanation** The initial linked list is 16 o 13 o 7. Insert 1 at the position 2 which currently has 7 in it. The updated linked list is 16 o 13 o 1 o 7.

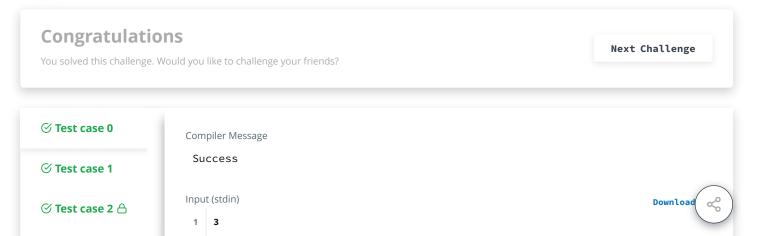


You have earned 5.00 points!

These points will also count towards your progress in the Problem Solving Badge.

45% 325/475





```
2 16
⊘ Test case 3 🖰
⊘ Test case 4 🖰
                         5 1
                         6 2
⊘ Test case 5 🖰
⊘ Test case 6 🖰
                        Expected Output
                                                                                                      Download
                         1 16 13 1 7
```

Contest Calendar | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature

