

Delete a Node | HackerRank

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This challenge is part of a tutorial track by [MyCodeSchool](#) and is accompanied by a video lesson.

Delete the node at a given position in a linked list and return a reference to the head node. The head is at position 0. The list may be empty after you delete the node. In that case, return a null value.

Example

$l\text{list} = 0 \rightarrow 1 \rightarrow 2 \rightarrow 3$
 $\text{position} = 2$

After removing the node at position 2, $l\text{list}' = 0 \rightarrow 1 \rightarrow 3$.

Function Description

Complete the `deleteNode` function in the editor below.

`deleteNode` has the following parameters:

- `SinglyLinkedListNode` pointer `l`: a reference to the head node in the list
- `int` `position`: the position of the node to remove

Returns

- `SinglyLinkedListNode` pointer: a reference to the head of the modified list

Input Format

The first line of input contains an integer n , the number of elements in the linked list. Each of the next n lines contains an integer, the node data values in order. The last line contains an integer, *position*, the position of the node to delete.

Constraints

- $1 \leq n \leq 1000$
- $1 \leq \text{list}[i] \leq 1000$, where $\text{list}[i]$ is the i^{th} element of the linked list.

Sample Input

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Difficulty: **Easy**

Max Score: 5

Submitted By: 169625

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Line: 102 Col: 2

```
78  */
79  SinglyLinkedListNode* deleteNode(SinglyLinkedListNode* head, int position) {
80      SinglyLinkedListNode *p,*q;
81      int count=1;
82      p=head;
83      if(position==0){
84          head=head->next;
85          free(p);
86          return head;
87      }
88      else{
89          while(count!=position)
90          {
91              p=p->next;
92              count++;
93          }
94          q=p->next;
95          p->next=q->next;
96          free(q);
97          return head;
98      }
99  }
100
101
102
103
104 > int main() ...
```

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Congratulations!

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

Sample Test case 0

Sample Test case 1

Input (stdin)

Download

1 8
2 20
3 6
4 2
5 19
6 7
7 4
8 15
9 9
10 3

Your Output (stdout)

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