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Test Name:	**Mock Test**
Taken On:	23 Apr 2023 12:54:25 IST
Time Taken:	12 min 4 sec/ 30 min
Invited by:	Ankush
Invited on:	23 Apr 2023 12:54:10 IST
Skills Score:	
Tags Score:	Algorithms 100/100 Core CS 100/100 Data Structures 100/100 Linked Lists 100/100

100%

100/100

scored in **Mock Test** in 12 min 4 sec on 23 Apr 2023 12:54:25 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	**Delete duplicate-value nodes from a sorted linked list** › **Coding**	10 min 56 sec	100/ 100	✓

QUESTION 1

Correct Answer

Score 100

Delete duplicate-value nodes from a sorted linked list › Coding

Algorithms | Linked Lists | Data Structures | Core CS

QUESTION DESCRIPTION

This challenge is part of a tutorial track by MyCodeSchool

You are given the pointer to the head node of a sorted linked list, where the data in the nodes is in ascending order. Delete nodes and return a sorted list with each distinct value in the original list. The given head pointer may be null indicating that the list is empty.

Example

$head$ refers to the first node in the list $1 \rightarrow 2 \rightarrow 2 \rightarrow 3 \rightarrow 3 \rightarrow 3 \rightarrow 3 \rightarrow NULL$.

Remove 1 of the 2 data values and return $head$ pointing to the revised list $1 \rightarrow 2 \rightarrow 3 \rightarrow NULL$.

Function Description

Complete the *removeDuplicates* function in the editor below.

removeDuplicates has the following parameter:

- *SinglyLinkedListNode pointer head:* a reference to the head of the list

Returns

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

Input Format

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

The format for each test case is as follows:

The first line contains an integer n, the number of elements in the linked list.
Each of the next n lines contains an integer, the $data$ value for each of the elements of the linked list.

Constraints

- $1 \leq t \leq 10$
- $1 \leq n \leq 1000$
- $1 \leq list[i] \leq 1000$

Sample Input

```
STDIN   Function
-----   --------
1       t = 1
5       n = 5
1       data values = 1, 2, 2, 3, 4
2
2
3
4
```

Sample Output

```
1 2 3 4
```

Explanation

The initial linked list is: $1 \to 2 \to 2 \to 3 \to 4 \to NULL$.

The final linked list is: $1 \to 2 \to 3 \to 4 \to NULL$.

CANDIDATE ANSWER

Language used: **C**

```c

/*
 * Complete the 'removeDuplicates' function below.
 *
 * The function is expected to return an INTEGER_SINGLY_LINKED_LIST.
 * The function accepts INTEGER_SINGLY_LINKED_LIST llist as parameter.
 */

/*
 * For your reference:
 *
 * SinglyLinkedListNode {
 *     int data;
 *     SinglyLinkedListNode* next;
 * };
 *
 */

SinglyLinkedListNode* removeDuplicates(SinglyLinkedListNode* llist) {
```

```
20    SinglyLinkedListNode *temp  = llist ;
21    SinglyLinkedListNode *check = 0 ;
22    SinglyLinkedListNode *checktemp = 0 ;
23    while (temp->next !=0 ) {
24      check = temp->next;
25      while (check->data == temp->data&&check){
26         checktemp = check ;
27         check = check->next ;
28         if (check)
29             free(checktemp) ;
30             temp->next = check ;
31         }
32         if (temp->next!=0)
33         temp = temp->next ;
34    }
35    return llist;
36 }
37
38
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0195 sec	7.47 KB
Testcase 2	Easy	Sample case	Success	0	0.0463 sec	7.34 KB
Testcase 3	Easy	Hidden case	Success	20	0.0184 sec	7.42 KB
Testcase 4	Easy	Hidden case	Success	20	0.0205 sec	7.46 KB
Testcase 5	Easy	Hidden case	Success	20	0.0243 sec	7.35 KB
Testcase 6	Easy	Hidden case	Success	20	0.0264 sec	7.38 KB
Testcase 7	Easy	Hidden case	Success	20	0.0197 sec	7.54 KB

No Comments