Hacker rank-Merge two sorted linked lists

```c
SinglyLinkedListNode* mergeLists(SinglyLinkedListNode* head1, SinglyLinkedListNode*
 head2) {
    SinglyLinkedListNode *head3 = NULL, *t1 = head1, *t2 = head2, *t3 = NULL;

    while (t1 != NULL && t2 != NULL) {
        SinglyLinkedListNode* newNode = malloc(sizeof(SinglyLinkedListNode));

        if (t1->data < t2->data) {
            newNode->data = t1->data;
            t1 = t1->next;
        } else {
            newNode->data = t2->data;
            t2 = t2->next;
        }

        newNode->next = NULL;

        if (head3 == NULL) {
            head3 = newNode;
            t3 = head3;
        } else {
            t3->next = newNode;
            t3 = newNode;
        }
    }

    // If one of the lists is not fully processed, append the remaining elements to
the merged list.
    if (t1 != NULL) {
        if (head3 == NULL) {
            head3 = t1;
        } else {
            t3->next = t1;
        }
    }

    if (t2 != NULL) {
        if (head3 == NULL) {
            head3 = t2;
        } else {
            t3->next = t2;
        }
    }

    return head3;
}
```

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  1
2  3
3  1
4  2
5  3
6  2
7  3
8  4
```

Your Output (stdout)

```
1  1 2 3 3 4
```

⊘ Sample Test case 0

⊘ Sample Test case 1

Input (stdin)   Download

```
1  1
2  3
3  4
4  5
5  6
6  3
7  1
8  2
9  10
```

Your Output (stdout)

```
1  1 2 4 5 6 10
```