

## Reverse linked list

<https://www.hackerrank.com/challenges/reverse-a-linked-list/problem>

*This challenge is part of a tutorial track by "MyCodeSchool" (<https://www.youtube.com/user/mycodeschool>) and is accompanied by a video lesson.*

You're given the pointer to the head node of a linked list. Change the next pointers of the nodes so that their order is reversed. The head pointer given may be null meaning that the initial list is empty.

### Input Format

You have to complete the `SinglyLinkedListNode reverse(SinglyLinkedListNode head)` method which takes one argument - the head of the linked list. You should NOT read any input from stdin/console.

The input is handled by the code in the editor and the format is as follows:

The first line contains an integer  $t$ , denoting the number of test cases.  
Each test case is of the following format:

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

### Constraints

$$1 \leq t \leq 10$$

$$1 \leq n \leq 1\,000$$

$$1 \leq list_i \leq 1\,000, \text{ where } list_i \text{ is the } i^{th} \text{ element in the list.}$$

### Output Format

Change the next pointers of the nodes that their order is reversed and \*return\* the head of the reversed linked list. Do NOT print anything to stdout/console.

The output is handled by the code in the editor. The output format is as follows:

For each test case, print in a new line the elements of the linked list after reversing it, separated by spaces.

Sample input	Expected output	Explanation
1 5 1 2 3 4 5	5 4 3 2 1	he initial linked list is: 1 → 2 → 3 → 4 → 5 → NULL The reversed linked list is: 5 → 4 → 3 → 2 → 1 → NULL