HackerRank

Insert a node at the head of a linked list

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

Given a pointer to the head of a linked list, insert a new node before the head. The next value in the new node should point to head and the data value should be replaced with a given value. Return a reference to the new head of the list. The head pointer given may be null meaning that the initial list is empty.

Function Description

Complete the function insertNodeAtHead with the following parameter(s):

- SinglyLinkedListNode llist: a reference to the head of a list
- data: the value to insert in the data field of the new node

Input Format

The first line contains an integer n, the number of elements to be inserted at the head of the list. The next n lines contain an integer each, the elements to be inserted, one per function call.

Constraints

- $1 \le n \le 1000$
- $1 \le list[i] \le 1000$

Sample Input

Sample Output

```
321
975
392
484
383
```

Explanation

Intially the list in NULL. After inserting 383, the list is 383 -> NULL. After inserting 484, the list is 484 -> 383 -> NULL.

After inserting 392, the list is 392 -> 484 -> 383 -> NULL.

After inserting 975, the list is 975 -> 392 -> 484 -> 383 -> NULL. After inserting 321, the list is 321 -> 975 -> 392 -> 484 -> 383 -> NULL.