

[Home](#) / [Contest 67](#) / Problem problem1

[problem1] Linked list Modification-1

Statement

Important instruction: **You are not allowed to use arrays.**

Input is a sequence of positive integers. Make a linked list L in the **reverse order** of the above sequence. Print the linked list L followed by a new line. Modify the linked list L as follows. Between any two consecutive elements (say x and y) in the linked list, insert **max** {1, smallest prime **strictly** between x and y}. Print the modified linked list.

Carefully read the input format, output format, and the public test case.
Use the starting code and read the instructions carefully from that file as well.

- Note (from the starting code):
- If the size is <= 0 then please use the following one line output
 - `printf("No elements in the linked list\n");`
 - Else please use the following print statements for printing each element in the linked list
 - `printf("%d ",xxx);`
 - After printing all the elements in each linkedlist, please use `printf("\n");`
 - Idea is to print one linkedlist per line where the elements are separated by single space character
 - Carefully go through the public test case.

Input Format

The number of elements in the sequence, followed by the elements in the sequence separated by a single space character.

Output Format

Elements in the linked list L (reverse of the input sequence) are separated by a single space character and a newline at the end. Elements in the modified (as per the problem statement) linked list that are separated by single space character and a newline at the end.

Max. Score	10
Difficulty	0
Time limit	1.0 s
Memory limit	10240 KB
Submission limit	1000
Allowed file extensions	.C

Public test cases

Test Case 1

Input

```
5 5 14 124 3 4
6 10 1 4 3 5 2
10 5 12 7 16 10 34 40 36 23 25
15 4 21 29 19 24 39 17 33 25 11 38 30 40 6 1
10 10 9 8 7 6 5 4 3 2 1
2 2 2
3 1 5 5
4 2 3 5 7
5 2 3 5 7 11
4 4 8 12 16
5 4 8 12 16 20
1 10
0
```

Output

```
1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10
2 2
2 1 2
5 5 1
5 1 5 2 1
7 5 3 2
7 1 5 1 3 1 2
11 7 5 3 2
11 1 7 1 5 1 3 1 2
16 12 8 4
16 13 12 11 8 5 4
20 16 12 8 4
20 17 16 13 12 11 8 5 4
10
10
No elements in the linked list
```

Submit Solution for Linked list Modification-1

Submissions left: 999

Submissions Over!

SEE MY PREVIOUS SUBMISSIONS