[problem2] Linked list Modification-2

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}. Let L1 be the modified linked list. Print L1. Modify the linked list L1 as follows. Between any two consecutive elements (say p and q) in the linked list, insert the greatest common divisor (GCD) of p and q. Let L2 be the modified linked list. Print L2.

Carefully read the input format, output format, and the public test case.

Use the starting code and read the instructions carefully from that file.

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 linked list, please use printf("\n");
- Idea is to print one linked list 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), separated by a single space character and a newline at the end.
Elements in the linked list L1 (as per the problem statement), separated by a single space character and a newline at the end.
Elements in the linked list L2 (as per the problem statement), 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
```

Copy

Output

```
4 3 124 14 5
4 1 3 5 124 17 14 7 5
4 1 1 1 3 1 5 1 124 1 17 1 14 7 7 1 5
2 5 3 4 1 10
2 3 5 1 3 1 4 2 1 2 10
2 1 3 1 5 1 1 1 3 1 1 1 4 2 2 1 1 1 2 2 10
25 23 36 40 34 10 16 7 12 5
25 1 23 29 36 37 40 37 34 11 10 11 16 11 7 11 12 7 5
25 1 1 1 23 1 29 1 36 1 37 1 40 1 37 1 34 1 11 1 10 1 11 1 16 1 11 1 7 1 11 1 12 1 7 1 5
1 6 40 30 38 11 25 33 17 39 24 19 29 21 4
1 2 6 7 40 31 30 31 38 13 11 13 25 29 33 19 17 19 39 29 24 23 19 23 29 23 21 5 4
1 1 2 2 6 1 7 1 40 1 31 1 30 1 31 1 38 1 13 1 11 1 13 1 25 1 29 1 33 1 19 1 17 1 19 1 39 1 29 1 24 1 23 1
19 1 23 1 29 1 23 1 21 1 5 1 4
1 2 3 4 5 6 7 8 9 10
1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10
1 1 1 1 2 1 1 1 3 1 1 1 4 1 1 1 5 1 1 1 6 1 1 1 7 1 1 1 8 1 1 1 9 1 1 1 10
```

Copy

DOWNLOAD STARTING CODE

Submit Solution for Linked list Modification-2

Submissions left: 999

Submissions Over!

SEE MY PREVIOUS SUBMISSIONS