**Linked Lists (Alternative Assignment)**

Implement the following linked list algorithm:

You have a linked list that contains N elements with integer values. Perform the following operation on this linked list:

* Select all sublists of the list that contain only even integers.
* Reverse the order of the selected “even integers“ sublists
* Print linked list with the adjusted values

#### Input Format

Input will be read from the standard input (stdin) and will have the following format:

First line of input contains single value **N**, size of the list  
Second line of input contains **N** space separated integers that are contained in the linked list.

Linked list will be using the following data structure:

typedef struct Node {  
 int data;  
 struct Node \*next;  
}Node;

*Tip: You can read standard input with scanf function.*

#### Output Format

Print all elements of the adjusted linked list

#### Constraints

* 1 <= N <= 10000
* 0 <= ai <= 10000000000

#### Example

*Input:*

6

1 2 8 9 12 16

*Output:*

1 8 2 9 16 12

*Explanation:*

This list has these sublists with only even numbers:

1 8 2 9 16 12

We are going to reverse these sublists:

1 2 8 9 12 16

to get the final list.

*Build/Delivery:*

To implement and test this assignment use the provided ass2.zip file or the code from t-sem3-cb-code/sd/alternatives/ass2 repository.

You can build your implementation by running ‘make’ and remove temporary files by running ‘make clean’.

*Testing:*

To test your code you can pass the provided test files as standard input e.g. like this:

*./ass2* < *in2\_1*

You can compare result to provided output file like this:

*./ass2 < in2\_1 > out*

*cmp out out2\_1*

If you want to run all tests (testing with all included test files) run

*make test*