Evensum

SEASON 7 - ROUND SIX



Ivancho is given N integers. Using any of these integers no more than once, Ivancho wants to get the maximum even (divisible by 2) sum. Help Ivancho by calculating that sum for him.

Note that if Ivancho uses none from the N integers, the sum is an even integer 0.

Input

The first line of the input file evensum.in consists of one integers N – the number of elements in the array.

The second line consists of N integers $A_1, A_2, ..., A_n$ - the elements of the array.

Output

On the first line of the output file evensum.out print the maximum possible even sum that can be obtained by using some of the given integers.

Note: Reading from a file and printing into a file is done by adding an operator for that. You can use the freopen operator by turning on the cstdio library and adding the following two lines to the beginning of your main function: freopen ("evensum.in", "r", stdin); freopen ("evensum.out", "w", stdout);

Constraints

 $1 \le N \le 100 000$ $1 \le A_i \le 10^9$

Time limit: 0.5 sec Memory limit: 256 MB

Sample tests

Input (evensum.in)	Output (evensum.out)
3	12
3 4 5	
1	0
5	
5	42
10 10 11 11 11	



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Clarifications

In the first sample, Ivancho can take the 3 numbers for a total sum of 12.

In the second sample, Ivancho can't take 5, because the sum will be odd and hence the answer is 0.

In the third sample, Ivancho can take both 10s as well as any of 2 of the 3 11s and thus receive an optimal even sum of 42.