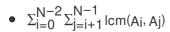
Personal LCM

We have an integer sequence of length N: A_0 , A_1 , \cdots , A_{N-1} .

Find the following sum (lcm(a, b) denotes the least common multiple of a and b):



Since the answer may be enormous, compute it modulo 998244353.

Constraints

- $1 \le N \le 2 * 10^5$
- $1 \le A_i \le 10^6$
- All values in input are integers.

Input:

First line of input will be consist of a single N, number of elements.

In next line you will get N space seperated Integers. A_0 A_1 A_2 A_3 A_4 A_{N-1}

Output:

Print the sum modulo 998244353.

Example:

Input:

3

246

Output:

22

Explaination:

lcm(2,4) + lcm(2,6) + lcm(4,6) = 4 + 6 + 12 = 22.