

Problem D

Special Numbers

Time limit: 2 second
Memory: 1024 megabytes

Problem Description

In a world full of strange and mysterious things, there exists a type of number known as a "special number." These numbers are not just ordinary prime numbers but also carry an unusual balance between even and odd digits. Specifically, a positive integer is called a special number if it satisfies two important conditions:

1. The number is a prime number.
2. The number has a different count of even and odd digits.

These special numbers are rare and precious, like hidden gems among the ordinary numbers.

Your task is to find and count all the special numbers in a given sequence **A** of integers. How many numbers in this sequence satisfy both conditions to become special numbers?

Input:

- The first line: Contains an integer number **N** (the number of elements in the sequence).
- The next line: Contains **N** integer numbers, separated by spaces.

Output:

- A single integer which is the answer.

Example:

INPUT	OUTPUT
5 121 311 122 23 241	2

The problem has **24** test cases.

- The first **12** tests have $N \leq 300$ and $|A_i| \leq 5 \times 10^4$.
- The next **4** tests have $N \leq 300$ and $|A_i| \leq 10^{12}$.
- The next **4** tests have $N \leq 2 \times 10^6$ and $|A_i| \leq 2 \times 10^6$.
- The last **4** tests have $N \leq 10^5$ and $|A_i| \leq 10^{12}$.