**[Number of Beautiful Pairs](https://leetcode.com/problems/number-of-beautiful-pairs/)**

You are given a **0-indexed**integer array nums. A pair of indices i, j where 0 <= i < j < nums.length is called beautiful if the **first digit** of nums[i] and the **last digit** of nums[j] are **coprime**.

Return *the total number of beautiful pairs in*nums.

Two integers x and y are **coprime** if there is no integer greater than 1 that divides both of them. In other words, x and y are coprime if gcd(x, y) == 1, where gcd(x, y) is the **greatest common divisor** of x and y.

**Example 1:**

**Input:** nums = [2,5,1,4]

**Output:** 5

**Explanation:** There are 5 beautiful pairs in nums:

When i = 0 and j = 1: the first digit of nums[0] is 2, and the last digit of nums[1] is 5. We can confirm that 2 and 5 are coprime, since gcd(2,5) == 1.

When i = 0 and j = 2: the first digit of nums[0] is 2, and the last digit of nums[2] is 1. Indeed, gcd(2,1) == 1.

When i = 1 and j = 2: the first digit of nums[1] is 5, and the last digit of nums[2] is 1. Indeed, gcd(5,1) == 1.

When i = 1 and j = 3: the first digit of nums[1] is 5, and the last digit of nums[3] is 4. Indeed, gcd(5,4) == 1.

When i = 2 and j = 3: the first digit of nums[2] is 1, and the last digit of nums[3] is 4. Indeed, gcd(1,4) == 1.

Thus, we return 5.

**Example 2:**

**Input:** nums = [11,21,12]

**Output:** 2

**Explanation:** There are 2 beautiful pairs:

When i = 0 and j = 1: the first digit of nums[0] is 1, and the last digit of nums[1] is 1. Indeed, gcd(1,1) == 1.

When i = 0 and j = 2: the first digit of nums[0] is 1, and the last digit of nums[2] is 2. Indeed, gcd(1,2) == 1.

Thus, we return 2.

**Constraints:**

* 2 <= nums.length <= 100
* 1 <= nums[i] <= 9999
* nums[i] % 10 != 0