

Problem 2575: Find the Divisibility Array of a String

Problem Information

Difficulty: Medium

Acceptance Rate: 35.27%

Paid Only: No

Tags: Array, Math, String

Problem Description

You are given a **0-indexed** string `word` of length `n` consisting of digits, and a positive integer `m`.

The **divisibility array** `div` of `word` is an integer array of length `n` such that:

* `div[i] = 1` if the **numeric value** of `word[0,...,i]` is divisible by `m`, or * `div[i] = 0` otherwise.

Return _the divisibility array of_ __`word`__.

Example 1:

Input: word = "998244353", m = 3 **Output:** [1,1,0,0,0,1,1,0,0] **Explanation:** There are only 4 prefixes that are divisible by 3: "9", "99", "998244", and "9982443".

Example 2:

Input: word = "1010", m = 10 **Output:** [0,1,0,1] **Explanation:** There are only 2 prefixes that are divisible by 10: "10", and "1010".

Constraints:

* `1 <= n <= 105` * `word.length == n` * `word` consists of digits from `0` to `9` * `1 <= m <= 109`

Code Snippets

C++:

```
class Solution {  
public:  
    vector<int> divisibilityArray(string word, int m) {  
  
    }  
};
```

Java:

```
class Solution {  
public int[] divisibilityArray(String word, int m) {  
  
}  
}
```

Python3:

```
class Solution:  
    def divisibilityArray(self, word: str, m: int) -> List[int]:
```