

1416. Restore The Array

[My Submissions \(/contest/biweekly-contest-24/problems/restore-the-array/submissions/\)](/contest/biweekly-contest-24/problems/restore-the-array/submissions/)

[Back to Contest \(/contest/biweekly-contest-24/\)](/contest/biweekly-contest-24/)

A program was supposed to print an array of integers. The program forgot to print whitespaces and the array is printed as a string of digits and all we know is that all integers in the array were in the range $[1, k]$ and there are no leading zeros in the array.

Given the string s and the integer k . There can be multiple ways to restore the array.

Return *the number of possible array* that can be printed as a string s using the mentioned program.

The number of ways could be very large so return it **modulo** $10^9 + 7$.

User Accepted: 796

User Tried: 1178

Total Accepted: 852

Total Submissions: 3084

Difficulty: **Hard**

Example 1:

Input: $s = "1000"$, $k = 10000$

Output: 1

Explanation: The only possible array is $[1000]$

Example 2:

Input: $s = "1000"$, $k = 10$

Output: 0

Explanation: There cannot be an array that was printed this way and has all integer ≥ 1 and $\leq k$.

Example 3:

Input: $s = "1317"$, $k = 2000$

Output: 8

Explanation: Possible arrays are $[1317], [131,7], [13,17], [1,317], [13,1,7], [1,31,7], [1,3,17]$

Example 4:

Input: $s = "2020"$, $k = 30$

Output: 1

Explanation: The only possible array is $[20,20]$. $[2020]$ is invalid because $2020 > 30$. $[2,0,2,0]$ is invalid because $0 < 1$.

Example 5:

Input: s = "1234567890", k = 90**Output:** 34**Constraints:**

- $1 \leq s.length \leq 10^5$.
- s consists of only digits and doesn't contain leading zeros.
- $1 \leq k \leq 10^9$.

[Discuss \(https://leetcode.com/problems/restore-the-array/discuss/\)](https://leetcode.com/problems/restore-the-array/discuss/)

JavaScript ▼



```
1 ▾ /**
2   * @param {string} s
3   * @param {number} k
4   * @return {number}
5   */
6 ▾ var numberOfArrays = function(s, k) {
7
8   };
```

☐ Custom Testcase☒ Use Example Testcases

Run

Submit