

# 2478. Number of Beautiful Partitions

## Description

You are given a string `s` that consists of the digits `'1'` to `'9'` and two integers `k` and `minLength`.

A partition of `s` is called **beautiful** if:

- `s` is partitioned into `k` non-intersecting substrings.
- Each substring has a length of **at least** `minLength`.
- Each substring starts with a **prime** digit and ends with a **non-prime** digit. Prime digits are `'2'`, `'3'`, `'5'`, and `'7'`, and the rest of the digits are non-prime.

Return *the number of beautiful partitions of* `s`. Since the answer may be very large, return it **modulo**  `$10^9 + 7$` .

A **substring** is a contiguous sequence of characters within a string.

### Example 1:

```
Input: s = "23542185131", k = 3, minLength = 2
Output: 3
Explanation: There exists three ways to create a beautiful partition:
"2354 | 218 | 5131"
"2354 | 21851 | 31"
"2354218 | 51 | 31"
```

### Example 2:

```
Input: s = "23542185131", k = 3, minLength = 3
Output: 1
Explanation: There exists one way to create a beautiful partition: "2354 | 218 | 5131".
```

### Example 3:

```
Input: s = "3312958", k = 3, minLength = 1
Output: 1
Explanation: There exists one way to create a beautiful partition: "331 | 29 | 58".
```

### Constraints:

- `1 <= k, minLength <= s.length <= 1000`
- `s` consists of the digits `'1'` to `'9'`.

