

# 43. Multiply Strings

## Description

Given two non-negative integers `num1` and `num2` represented as strings, return the product of `num1` and `num2`, also represented as a string.

**Note:** You must not use any built-in BigInteger library or convert the inputs to integer directly.

### Example 1:

Input: `num1 = "2"`, `num2 = "3"`

Output: `"6"`

### Example 2:

Input: `num1 = "123"`, `num2 = "456"`

Output: `"56088"`

### Constraints:

- `1 <= num1.length, num2.length <= 200`
- `num1` and `num2` consist of digits only.
- Both `num1` and `num2` do not contain any leading zero, except the number `0` itself.

