



1945. Sum of Digits of String After Convert

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You are given a string s consisting of lowercase English letters, and an integer k.

First, **convert** s into an integer by replacing each letter with its position in the alphabet (i.e., replace 'a' with 1, 'b' with 2, ..., 'z' with 26). Then, **transform** the integer by replacing it with the **sum of its digits**. Repeat the **transform** operation k **times** in total.

For example, if s = "zbax" and k = 2, then the resulting integer would be 8 by the following operations:

- Convert: "zbax" → "(26)(2)(1)(24)" → "262124" → 262124
- Transform #1: $262124 \rightarrow 2 + 6 + 2 + 1 + 2 + 4 \rightarrow 17$
- Transform #2: 17 → 1 + 7 → 8

Return the resulting integer after performing the operations described above.

User Accepted:	5770
User Tried:	6304
Total Accepted:	5902
Total Submissions:	9421
Difficulty:	Easy

Example 1:

Input: s = "iiii", k = 1Output: 36 Explanation: The operations are as follows: - Convert: "iiii" \rightarrow "(9)(9)(9)(9)" \rightarrow "9999" \rightarrow 9999 - Transform #1: 9999 \rightarrow 9 + 9 + 9 + 9 \rightarrow 36 Thus the resulting integer is 36.

Example 2:

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Input: s = "leetcode", k = 2 

Output: 6 

Explanation: The operations are as follows: 

- Convert: "leetcode" \rightarrow "(12)(5)(5)(20)(3)(15)(4)(5)" \rightarrow "12552031545" \rightarrow 12552031545 

- Transform #1: 12552031545 \rightarrow 1 + 2 + 5 + 5 + 2 + 0 + 3 + 1 + 5 + 4 + 5 \rightarrow 33 

- Transform #2: 33 \rightarrow 3 + 3 \rightarrow 6 

Thus the resulting integer is 6.
```

Example 3:

```
Input: s = "zbax", k = 2
Output: 8
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Constraints:

• 1 <= s.length <= 100

- 1 <= k <= 10
- s consists of lowercase English letters.

Discuss (https://leetcode.com/problems/sum-of-digits-of-string-after-convert/discuss)

