

# 1334. Sum of Numbers With Units Digit K

## Difficulty : Medium

<https://leetcode.com/problems/sum-of-numbers-with-units-digit-k>

Given two integers `num` and `k`, consider a set of positive integers with the following properties:

- The units digit of each integer is `k`.
- The sum of the integers is `num`.

Return the **minimum** possible size of such a set, or `-1` if no such set exists.

Note:

- The set can contain multiple instances of the same integer, and the sum of an empty set is considered `0`.
- The **units digit** of a number is the rightmost digit of the number.

### Example 1:

**Input:** `num = 58, k = 9`

**Output:** `2`

**Explanation:**

One valid set is `[9,49]`, as the sum is `58` and each integer has a units digit of `9`.

Another valid set is `[19,39]`.

It can be shown that `2` is the minimum possible size of a valid set.

### Example 2:

**Input:** `num = 37, k = 2`

**Output:** `-1`

**Explanation:** It is not possible to obtain a sum of `37` using only integers that have a units digit of `2`.

### Example 3:

**Input:** `num = 0, k = 7`

**Output:** `0`

**Explanation:** The sum of an empty set is considered `0`.

### Constraints:

- $0 \leq \text{num} \leq 3000$
- $0 \leq k \leq 9$