5218. Sum of Numbers With Units Digit K

My Submissions (/contest/weekly-contest-298/problems/sum-of-numbers-with-units-digit-k/submissions/) Back to Contest (/contest/weekly-contest-298/)

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.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

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 <= num <= 3000`
- `0 <= k <= 9`

JavaScript

```javascript
const minimumNumbers = (x, k) => {
    let a = [], dp = Array(x + 1).fill(Number.MAX_SAFE_INTEGER);
    for (let v = k; v <= x; v++) {
        let s = v + '';
        if (s[s.length - 1] - '0' == k) a.push(v);
    }
    dp[0] = 0;
    for (const v of a) {
        for (let i = v; i <= x; i++) {
            dp[i] = Math.min(dp[i], dp[i - v] + 1);
        }
    }
    return dp[x] == Number.MAX_SAFE_INTEGER ? -1 : dp[x];
};
```

Custom Testcase Use Example Testcases

Run Submit

Submission Result: Accepted (/submissions/detail/725686808/) More Details (/submissions/detail/725686808/)

Share your acceptance!

1