2457. Minimum Addition to Make Integer Beautiful

Description

You are given two positive integers `n` and `target`.

An integer is considered **beautiful** if the sum of its digits is less than or equal to `target`.

Return the *minimum* ***non-negative*** *integer* `x` *such that* `n + x` *is beautiful*. The input will be generated such that it is always possible to make `n` beautiful.

Example 1:

```
Input: n = 16, target = 6
Output: 4
Explanation: Initially n is 16 and its digit sum is 1 + 6 = 7. After adding 4, n becomes 20 and digit sum becomes 2 + 0 = 2. It can be shown that we can not make n beautiful with adding non-negative integer less than 4.
```

Example 2:

```
Input: n = 467, target = 6
Output: 33
Explanation: Initially n is 467 and its digit sum is 4 + 6 + 7 = 17. After adding 33, n becomes 500 and digit sum becomes 5 + 0 + 0 = 5. It can be shown that we can not make n beautiful with adding non-negative integer less than 33.
```

Example 3:

```
Input: n = 1, target = 1
Output: 0
Explanation: Initially n is 1 and its digit sum is 1, which is already smaller than or equal to target.
```

Constraints:

- `1 <= n <= 10 ^ 12`
- `1 <= target <= 150`
- The input will be generated such that it is always possible to make `n` beautiful.