Problem 233: Number of Digit One

Problem Information

Difficulty: Hard
Acceptance Rate: 36.96%
Paid Only: No
Tags: Math, Dynamic Programming, Recursion

Problem Description

Given an integer `n`, count _the total number of digit_`1` _appearing in all non-negative integers less than or equal to_ `n`.

Example 1:

Input: n = 13 **Output:** 6

Example 2:

Input: n = 0 **Output:** 0

Constraints:

* `0 <= n <= 109`

Code Snippets

C++:

```cpp
class Solution {
public:
    int countDigitOne(int n) {


    }
};
```

Java:

```java
class Solution {
public int countDigitOne(int n) {


}
}
```

Python3:

```python
class Solution:
def countDigitOne(self, n: int) -> int:
```