Problem 357: Count Numbers with Unique Digits

Problem Information

Difficulty: Medium
Acceptance Rate: 55.00%
Paid Only: No
Tags: Math, Dynamic Programming, Backtracking

Problem Description

Given an integer `n`, return the count of all numbers with unique digits, `x`, where `0 <= x < 10n`.

Example 1:

Input: n = 2 **Output:** 91 **Explanation:** The answer should be the total numbers in the range of 0 ≤ x < 100, excluding 11,22,33,44,55,66,77,88,99

Example 2:

Input: n = 0 **Output:** 1

Constraints:

* `0 <= n <= 8`

Code Snippets

C++:

```
class Solution {
public:
int countNumbersWithUniqueDigits(int n) {
```

```
}
};
```

Java:

```
class Solution {
public int countNumbersWithUniqueDigits(int n) {

}
}
```

Python3:

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