

Problem 400: Nth Digit

Problem Information

Difficulty: Medium

Acceptance Rate: 36.56%

Paid Only: No

Tags: Math, Binary Search

Problem Description

Given an integer n , return the n th digit of the infinite integer sequence $[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, \dots]$.

Example 1:

Input: $n = 3$ **Output:** 3

Example 2:

Input: $n = 11$ **Output:** 0 **Explanation:** The 11th digit of the sequence 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, ... is a 0, which is part of the number 10.

Constraints:

$1 \leq n \leq 2^{31} - 1$

Code Snippets

C++:

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

    }
}
```

```
};
```

Java:

```
class Solution {  
    public int findNthDigit(int n) {  
  
    }  
}
```

Python3:

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