

Problem 2802: Find The K-th Lucky Number

Problem Information

Difficulty: Medium

Acceptance Rate: 76.16%

Paid Only: Yes

Tags: Math, String, Bit Manipulation

Problem Description

We know that `4` and `7` are **lucky** digits. Also, a number is called **lucky** if it contains **only** lucky digits.

You are given an integer `k`, return `the_kth` lucky number represented as a **string**.

Example 1:

Input: `k = 4` **Output:** `"47"` **Explanation:** The first lucky number is 4, the second one is 7, the third one is 44 and the fourth one is 47.

Example 2:

Input: `k = 10` **Output:** `"477"` **Explanation:** Here are lucky numbers sorted in increasing order: 4, 7, 44, 47, 74, 77, 444, 447, 474, 477. So the 10th lucky number is 477.

Example 3:

Input: `k = 1000` **Output:** `"777747447"` **Explanation:** It can be shown that the 1000th lucky number is 777747447.

Constraints:

`1 <= k <= 109`

Code Snippets

C++:

```
class Solution {  
public:  
    string kthLuckyNumber(int k) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String kthLuckyNumber(int k) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def kthLuckyNumber(self, k: int) -> str:
```