Problem 386: Lexicographical Numbers

Problem Information

Difficulty: Medium
Acceptance Rate: 76.14%
Paid Only: No
Tags: Depth-First Search, Trie

Problem Description

Given an integer `n`, return all the numbers in the range `[1, n]` sorted in lexicographical order.

You must write an algorithm that runs in `O(n)` time and uses `O(1)` extra space.

Example 1:

Input: n = 13 **Output:** [1,10,11,12,13,2,3,4,5,6,7,8,9]

Example 2:

Input: n = 2 **Output:** [1,2]

Constraints:

* `1 <= n <= 5 * 104`

Code Snippets

C++:

```
class Solution {
public:
vector<int> lexicalOrder(int n) {
```

```
}
};
```

Java:

```
class Solution {
public List<Integer> lexicalOrder(int n) {

}
}
```

Python3:

```
class Solution:
def lexicalOrder(self, n: int) -> List[int]:
```