Problem 17: Letter Combinations of a Phone Number

Problem Information

Difficulty: Medium
Acceptance Rate: 64.89%
Paid Only: No
Tags: Hash Table, String, Backtracking

Problem Description

Given a string containing digits from `2-9` inclusive, return all possible letter combinations that the number could represent. Return the answer in **any order**.

A mapping of digits to letters (just like on the telephone buttons) is given below. Note that 1 does not map to any letters.

Example 1:

Input: digits = "23" **Output:** ["ad","ae","af","bd","be","bf","cd","ce","cf"]

Example 2:

Input: digits = "2" **Output:** ["a","b","c"]

Constraints:

* `1 <= digits.length <= 4` * `digits[i]` is a digit in the range `['2', '9']`.

Code Snippets

C++:

```
class Solution {
public:
vector<string> letterCombinations(string digits) {

}
};
```

Java:

```
class Solution {
public List<String> letterCombinations(String digits) {

}
}
```

Python3:

```
class Solution:
def letterCombinations(self, digits: str) -> List[str]:
```