# 17. Letter Combinations of a Phone Number

# 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 = ""
Output: []
```

## **Example 3:**

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

# **Constraints:**

- 0 <= digits.length <= 4
- digits[i] is a digit in the range ['2', '9'].