






LEETCODE SOLUTIONS - YOGESH MUNEEES


17. Letter Combinations of a Phone Number

Medium  16.1K  890  

 Companies

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.



Solution:

```
class Solution:
    def letterCombinations(self, digits: str) -> List[str]:
        dic = {
            '2': ["a", "b", "c"], '3': ["d", "e", "f"], '4': ["g", "h", "i"], '5': ["j", "k", "l"], '6': ["m", "n", "o"],
            '7': ["p", "q", "r", "s"], '8': ["t", "u", "v"], '9': ["w", "x", "y", "z"]}
        if digits=="":
            return []
        res = dic[digits[0]]
        length = len(digits)
        if length==1:
            return res
        digits = digits[1:]
        update = []
        strin = ""
        while digits!="":
            for i in res:
                for j in dic[digits[0]]:
                    strin += i
                    strin += j
                    update.append(strin)
                    strin = ""
            res = update[:]
            update = []
            digits = digits[1:]
        return res
```