class Solution:

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

if not digits:

return []

phone = {"2": "abc", "3": "def", "4": "ghi", "5": "jkl", "6": "mno", "7": "pqrs", "8": "tuv", "9": "wxyz"}

res = []

def backtrack(combination, next\_digits):

if not next\_digits:

res.append(combination)

return

for letter in phone[next\_digits[0]]:

backtrack(combination + letter, next\_digits[1:])

backtrack("", digits)

return res