

## 17. Letter Combinations of a Phone Number

Medium 16.4K 876

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.



### Example 1:

**Input:** digits = "23"

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

### Example 2:

**Input:** digits = ""

i Java Auto

```
1 class Solution {
2     public List<String> letterCombinations(String digits) {
3         List<String> ans = new ArrayList<>();
4         if (digits.length() == 0)
5             return ans;
6
7         HashMap<Character, String> hm = new HashMap<>();
8         hm.put('2', "abc");
9         hm.put('3', "def");
10        hm.put('4', "ghi");
11        hm.put('5', "jkl");
12        hm.put('6', "mno");
13        hm.put('7', "pqrs");
14        hm.put('8', "tuv");
15        hm.put('9', "wxyz");
16
17        backtrack(digits, 0, hm, new StringBuilder(), ans);
18        return ans;
19    }
20 }
```

Testcase Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

digits =  
"23"

Output

["ad","ae","af","bd","be","bf","cd","ce","cf"]

Console



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## 34. Find First and Last Position of Element in Sorted Array

Medium 17.9K 437

Companies

Given an array of integers `nums` sorted in non-decreasing order, find the starting and ending position of a given `target` value.

If `target` is not found in the array, return `[-1, -1]`.

You must write an algorithm with  $O(\log n)$  runtime complexity.

Example 1:

**Input:** `nums = [5,7,7,8,8,10]`, `target = 8`

**Output:** `[3,4]`

Example 2:

**Input:** `nums = [5,7,7,8,8,10]`, `target = 6`

**Output:** `[-1,-1]`

Example 3:

**Input:** `nums = []`, `target = 0`

**Output:** `[-1,-1]`

Constraints:

i Java Auto

```
1 class Solution {
2     public int first(int[] nums, int target) {
3         int ans = -1;
4         int low = 0, high = nums.length - 1;
5         while (low <= high) {
6             int mid = low + (high - low) / 2;
7             if (nums[mid] == target) {
8                 ans = mid;
9                 high = mid - 1;
10            } else if (nums[mid] < target) {
11                low = mid + 1;
12            } else {
13                high = mid - 1;
14            }
15        }
16        return ans;
17    }
18 }
```

Testcase Result

Accepted Runtime: 0 ms

Case 1 Case 2 Case 3

Input

nums =

[5,7,7,8,8,10]

target =

8

Output

Console

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