

# Problem 1079: Letter Tile Possibilities

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 83.54%

**Paid Only:** No

**Tags:** Hash Table, String, Backtracking, Counting

## Problem Description

You have `n` `tiles`, where each tile has one letter `tiles[i]` printed on it.

Return \_the number of possible non-empty sequences of letters\_ you can make using the letters printed on those `tiles`.

**Example 1:**

**Input:** tiles = "AAB" **Output:** 8 **Explanation:** The possible sequences are "A", "B", "AA", "AB", "BA", "AAB", "ABA", "BAA".

**Example 2:**

**Input:** tiles = "AAABBC" **Output:** 188

**Example 3:**

**Input:** tiles = "V" **Output:** 1

**Constraints:**

\* `1 <= tiles.length <= 7` \* `tiles` consists of uppercase English letters.

## Code Snippets

**C++:**

```
class Solution {  
public:  
    int numTilePossibilities(string tiles) {  
  
    }  
};
```

**Java:**

```
class Solution {  
public int numTilePossibilities(String tiles) {  
  
}  
}
```

**Python3:**

```
class Solution:  
    def numTilePossibilities(self, tiles: str) -> int:
```