49. Group Anagrams

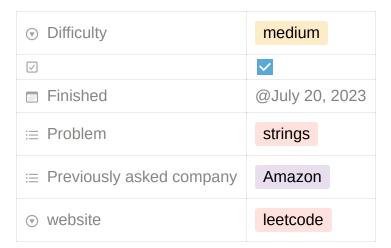|		
⊙ Difficulty	medium	
☑	☑	
📅 Finished	@July 20, 2023	
☰ Problem	strings	
☰ Previously asked company	Amazon	
⊙ website	leetcode	

Question:

Given an array of strings `strs`, group **the anagrams** together. You can return the answer in **any order**.

An **Anagram** is a word or phrase formed by rearranging the letters of a different word or phrase, typically using all the original letters exactly once.

Example 1:

```
Input: strs = ["eat","tea","tan","ate","nat","bat"]
Output: [["bat"],["nat","tan"],["ate","eat","tea"]]
```

Example 2:

```
Input: strs = [""]
Output: [[""]]
```

Example 3:

```
Input: strs = ["a"]
Output: [["a"]]
```

Optimal solution:

Time complexity: O(m*n)

Space complexity: O(n)

```python
class Solution(object):
    def groupAnagrams(self, strs):
        hashmap = defaultdict(list)

        for s in strs:
            count = [0]*26
            for c in s:
                count[ord(c) - ord('a')] += 1
            hashmap[tuple(count)].append(s)

        return hashmap.values()
```