

# Valid Anagram

Difficulty	Easy
Category	Arrays
Question	<a href="https://leetcode.com/problems/valid-anagram/">https://leetcode.com/problems/valid-anagram/</a>
Solution	<a href="https://youtu.be/9UtlNBqnCgA">https://youtu.be/9UtlNBqnCgA</a>
Status	Done

## Question

Given two strings `s` and `t`, return `true` if `t` is an anagram of `s`, and `false` otherwise.

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

### Example 1:

```
Input: s = "anagram", t = "nagaram"  
Output: true
```

### Example 2:

```
Input: s = "rat", t = "car"  
Output: false
```

# Idea



If count frequency of two strings are the same, true; otherwise false →  $O(n \log n)$



HashMap →  $O(n)$

# Solution

```
class Solution:
    def isAnagram(self, s: str, t: str) -> bool:
        sorted_s = sorted(s)
        sorted_t = sorted(t)
        return sorted_s == sorted_t
```

```
class Solution:
    def isAnagram(self, s: str, t: str) -> bool:
        count = defaultdict(int)

        # Count the frequency of characters in string s
        for x in s:
            count[x] += 1

        # Decrement the frequency of characters in string t
        for x in t:
            count[x] -= 1

        # Check if any character has non-zero frequency
        for val in count.values():
            if val != 0:
                return False

        return True
```