1.4   Write a method to decide if two strings are anagrams or not.

SOLUTION

There are two easy ways to solve this problem:

Solution #1: Sort the strings

```
1   boolean anagram(String s, String t) {
2       return sort(s) == sort(t);
3   }
```

Solution #2: Check if the two strings have identical counts for each unique char.

```
1   public static boolean anagram(String s, String t) {
2       if (s.length() != t.length()) return false;
3       int[] letters = new int[256];
4       int num_unique_chars = 0;
5       int num_completed_t = 0;
6       char[] s_array = s.toCharArray();
7       for (char c : s_array) { // count number of each char in s.
8           if (letters[c] == 0) ++num_unique_chars;
9           ++letters[c];
10      }
11      for (int i = 0; i < t.length(); ++i) {
12          int c = (int) t.charAt(i);
13          if (letters[c] == 0) { // Found more of char c in t than in s.
14              return false;
15          }
16          --letters[c];
17          if (letters[c] == 0) {
18              ++num_completed_t;
19              if (num_completed_t == num_unique_chars) {
20                  // it's a match if t has been processed completely
21                  return i == t.length() - 1;
22              }
23          }
24      }
25      return false;
26  }
```