

## 205. Isomorphic Strings

Easy 2505 531 Add to List Share

Given two strings `s` and `t`, determine if they are isomorphic.

Two strings `s` and `t` are isomorphic if the characters in `s` can be replaced to get `t`.

All occurrences of a character must be replaced with another character while preserving the order of characters. No two characters may map to the same character, but a character may map to itself.

### Example 1:

**Input:** `s = "egg", t = "add"`  
**Output:** `true`

### Example 2:

**Input:** `s = "foo", t = "bar"`  
**Output:** `false`

### Example 3:

**Input:** `s = "paper", t = "title"`  
**Output:** `true`

### Constraints:

```

1 class Solution:
2     def isIsomorphic(self, s: str, t: str) -> bool:
3
4         mapping_s_t = {}
5         mapping_t_s = {}
6
7         for c1, c2 in zip(s, t):
8
9             # Case 1: No mapping exists in either of the dictionaries
10            if (c1 not in mapping_s_t) and (c2 not in mapping_t_s):
11                mapping_s_t[c1] = c2
12                mapping_t_s[c2] = c1
13
14            # Case 2: Either mapping doesn't exist in one of the dictionaries
15            # or Mapping exists and it doesn't match in either of the dictionaries or both
16
17            elif mapping_s_t.get(c1) != c2 or mapping_t_s.get(c2) != c1:
18                return False
19
20        return True

```

Testcase

Run Code Result

Debugger

Accepted

Runtime: 47 ms

?

Your input

`"bad"`  
`"bab"`

Output

`false`

Diff

Expected

`false`