

Problem 681: Next Closest Time

Problem Information

Difficulty: Medium

Acceptance Rate: 46.94%

Paid Only: Yes

Tags: Hash Table, String, Backtracking, Enumeration

Problem Description

Given a `time`` represented in the format ``HH:MM``, form the next closest time by reusing the current digits. There is no limit on how many times a digit can be reused.

You may assume the given input string is always valid. For example, ``01:34``, ``12:09`` are all valid. ``1:34``, ``12:9`` are all invalid.

Example 1:

Input: `time = "19:34"` **Output:** `"19:39"` **Explanation:** The next closest time choosing from digits `1`, `9`, `3`, `4`, is `19:39`, which occurs 5 minutes later. It is not `19:33`, because this occurs 23 hours and 59 minutes later.

Example 2:

Input: `time = "23:59"` **Output:** `"22:22"` **Explanation:** The next closest time choosing from digits `2`, `3`, `5`, `9`, is `22:22`. It may be assumed that the returned time is next day's time since it is smaller than the input time numerically.

Constraints:

`time.length == 5`` `time`` is a valid time in the form ``HH:MM``. `0 <= HH < 24`` `0 <= MM < 60``

Code Snippets

C++:

```
class Solution {  
public:  
    string nextClosestTime(string time) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String nextClosestTime(String time) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def nextClosestTime(self, time: str) -> str:
```