

Problem 949: Largest Time for Given Digits

Problem Information

Difficulty: Medium

Acceptance Rate: 35.72%

Paid Only: No

Tags: Array, String, Backtracking, Enumeration

Problem Description

Given an array `arr` of 4 digits, find the latest 24-hour time that can be made using each digit **exactly once**.

24-hour times are formatted as `"HH:MM"`, where `HH` is between `"00"` and `"23"`, and `MM` is between `"00"` and `"59"`. The earliest 24-hour time is `"00:00"`, and the latest is `"23:59"`.

Return `the latest 24-hour time in "HH:MM" format`. If no valid time can be made, return an empty string.

Example 1:

Input: `arr = [1,2,3,4]` **Output:** `"23:41"` **Explanation:** The valid 24-hour times are `"12:34"`, `"12:43"`, `"13:24"`, `"13:42"`, `"14:23"`, `"14:32"`, `"21:34"`, `"21:43"`, `"23:14"`, and `"23:41"`. Of these times, `"23:41"` is the latest.

Example 2:

Input: `arr = [5,5,5,5]` **Output:** `""` **Explanation:** There are no valid 24-hour times as `"55:55"` is not valid.

Constraints:

`arr.length == 4` `0 <= arr[i] <= 9`

Code Snippets

C++:

```
class Solution {  
public:  
    string largestTimeFromDigits(vector<int>& arr) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String largestTimeFromDigits(int[] arr) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def largestTimeFromDigits(self, arr: List[int]) -> str:
```