

# Problem 1363: Largest Multiple of Three

## Problem Information

**Difficulty:** Hard

**Acceptance Rate:** 33.07%

**Paid Only:** No

**Tags:** Array, Math, Dynamic Programming, Greedy, Sorting

## Problem Description

Given an array of digits `digits`, return \_the largest multiple of\*\*\*three\*\* that can be formed by concatenating some of the given digits in \*\*any order\*\*\_. If there is no answer return an empty string.

Since the answer may not fit in an integer data type, return the answer as a string. Note that the returning answer must not contain unnecessary leading zeros.

**Example 1:**

**Input:** digits = [8,1,9] **Output:** "981"

**Example 2:**

**Input:** digits = [8,6,7,1,0] **Output:** "8760"

**Example 3:**

**Input:** digits = [1] **Output:** ""

**Constraints:**

\* `1 <= digits.length <= 104` \* `0 <= digits[i] <= 9`

## Code Snippets

**C++:**

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

**Java:**

```
class Solution {  
public String largestMultipleOfThree(int[] digits) {  
  
}  
}
```

**Python3:**

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