Problem 2160: Minimum Sum of Four Digit Number After Splitting Digits

Problem Information

Difficulty: Easy
Acceptance Rate: 86.16%
Paid Only: No
Tags: Math, Greedy, Sorting

Problem Description

You are given a **positive** integer `num` consisting of exactly four digits. Split `num` into two new integers `new1` and `new2` by using the **digits** found in `num`. **Leading zeros** are allowed in `new1` and `new2`, and **all** the digits found in `num` must be used.

* For example, given `num = 2932`, you have the following digits: two `2`'s, one `9` and one `3`. Some of the possible pairs `[new1, new2]` are `[22, 93]`, `[23, 92]`, `[223, 9]` and `[2, 329]`.

Return _the**minimum** possible sum of _`new1` _and_`new2`.

Example 1:

Input: num = 2932 **Output:** 52 **Explanation:** Some possible pairs [new1, new2] are [29, 23], [223, 9], etc. The minimum sum can be obtained by the pair [29, 23]: 29 + 23 = 52.

Example 2:

Input: num = 4009 **Output:** 13 **Explanation:** Some possible pairs [new1, new2] are [0, 49], [490, 0], etc. The minimum sum can be obtained by the pair [4, 9]: 4 + 9 = 13.

Constraints:

* `1000 <= num <= 9999`

Code Snippets

C++:

```
class Solution {
public:
int minimumSum(int num) {

}
};
```

Java:

```
class Solution {
public int minimumSum(int num) {

}
}
```

Python3:

```
class Solution:
def minimumSum(self, num: int) -> int:
```