

Problem 1619: Mean of Array After Removing Some Elements

Problem Information

Difficulty: Easy

Acceptance Rate: 71.09%

Paid Only: No

Tags: Array, Sorting

Problem Description

Given an integer array `arr`, return the mean of the remaining integers after removing the smallest 5% and the largest 5% of the elements.

Answers within 10^{-5} of the **actual answer** will be considered accepted.

Example 1:

Input: `arr = [1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,3]` **Output:** 2.00000 **Explanation:**
After erasing the minimum and the maximum values of this array, all elements are equal to 2, so the mean is 2.

Example 2:

Input: `arr = [6,2,7,5,1,2,0,3,10,2,5,0,5,5,0,8,7,6,8,0]` **Output:** 4.00000

Example 3:

Input: `arr = [6,0,7,0,7,5,7,8,3,4,0,7,8,1,6,8,1,1,2,4,8,1,9,5,4,3,8,5,10,8,6,6,1,0,6,10,8,2,3,4]`
Output: 4.77778

Constraints:

$20 \leq \text{arr.length} \leq 1000$ arr.length is a multiple of 20. $0 \leq \text{arr}[i] \leq 105$

Code Snippets

C++:

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

Java:

```
class Solution {  
    public double trimMean(int[] arr) {  
  
    }  
}
```

Python3:

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