Editorial



Discussions



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# Mini-Max Sum ☆

Given five positive integers, find the minimum and maximum values that can be calculated by summing exactly four of the five integers. Then print the respective minimum and maximum values as a single line of two space-separated long integers.

Leaderboard

## **Input Format**

**Problem** 

A single line of five space-separated integers.

#### **Constraints**

• Each integer is in the inclusive range  $[1...10^9]$ .

Submissions

#### **Output Format**

Print two space-separated long integers denoting the respective minimum and maximum values that can be calculated by summing exactly four of the five integers. (The output can be greater than a 32 bit integer.)

#### Sample Input

1 2 3 4 5

# Sample Output

10 14

### **Explanation**

Our initial numbers are 1, 2, 3, 4, and 5. We can calculate the following sums using four of the five integers:

- 1. If we sum everything except 1, our sum is 2+3+4+5=14.
- 2. If we sum everything except  $\mathbf{2}$ , our sum is  $\mathbf{1} + \mathbf{3} + \mathbf{4} + \mathbf{5} = \mathbf{13}$ .
- 3. If we sum everything except 3, our sum is 1+2+4+5=12.
- 4. If we sum everything except 4, our sum is 1 + 2 + 3 + 5 = 11.
- 5. If we sum everything except  $\mathbf{5}$ , our sum is  $\mathbf{1} + \mathbf{2} + \mathbf{3} + \mathbf{4} = \mathbf{10}$ .

Hints: Beware of integer overflow! Use 64-bit Integer.

Need help to get started? Try the Solve Me First problem

iai		
	Author	bishop15
	Difficulty	Easy
	Max Score	10
	Submitted By	266090
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```
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                                             C++
                                                                        K Z GB
 1 ▼ #include <bits/stdc++.h>
    using namespace std;
    vector<string> split_string(string);
    // Complete the miniMaxSum function below.
 8 ▼ void miniMaxSum(vector<int> arr) {
```

```
9
 10
 11
 12
 13 int main()
 14 ▼ {
 15
         string arr_temp_temp;
 16
         getline(cin, arr_temp_temp);
 17
 18
         vector<string> arr_temp = split_string(arr_temp_temp);
 19
 20
         vector<int> arr(5);
 21
22 🔻
         for (int i = 0; i < 5; i++) {
23 ▼
             int arr_item = stoi(arr_temp[i]);
 24
 25 ▼
             arr[i] = arr_item;
 26
 27
 28
         miniMaxSum(arr);
 29
 30
         return 0;
 31
    }
 32
 33 ▼vector<string> split_string(string input_string) {
 34 ▼
         string::iterator new_end = unique(input_string.begin(),
     input_string.end(), [] (const char &x, const char &y) {
 35
             return x == y and x == ' ';
 36
         });
 37
         input_string.erase(new_end, input_string.end());
 38
 39
 40
         while (input_string[input_string.length() - 1] == ' ') {
 41
             input_string.pop_back();
 42
 43
 44
         vector<string> splits;
 45
         char delimiter = ' ';
 46
 47
         size_t i = 0;
         size_t pos = input_string.find(delimiter);
 48
 49
         while (pos != string::npos) {
 50 ▼
             splits.push_back(input_string.substr(i, pos - i));
 51
 52
 53
             i = pos + 1;
             pos = input_string.find(delimiter, i);
 54
 55
 56
         splits.push_back(input_string.substr(i, min(pos,
 57
     input_string.length()) - i + 1));
 58
 59
         return splits;
 60
     }
 61
                                                                   Line: 11 Col: 2
__ Upload Code as File
                   Test against custom input
                                                                  Submit Code
                                                  Run Code
```

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