

Mini-Max Sum



Problem Submissions Leaderboard Discussions Editorial

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.

Input Format

A single line of five space-separated integers.

Constraints

• Each integer is in the inclusive range [1, 109].

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

As you can see, the minimal sum is 1+2+3+4=10 and the maximal sum is 2+3+4+5=14. Thus, we print these minimal and maximal sums as two space-separated integers on a new line.

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

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

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Submissions: 32799

Max Score: 10
Difficulty: Easy
Rate This Challenge:
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```
Current Buffer (saved locally, editable) &
                                                                                           Java 7
                                                                                                                             *
 1 ▼ import java.io.*;
 2 import java.util.*;
 3
    import java.text.*;
    import java.math.*;
    import java.util.regex.*;
 7 ▼ public class Solution {
 8
 9 ▼
        public static void main(String[] args) {
             Scanner in = new Scanner(System.in);
10
             /*long a = in.nextLong();
11 ▼
12
             long b = in.nextLong();
13
             long c = in.nextLong();
14
             long d = in.nextLong();
15
             long e = in.nextLong();*/
16
17
             long sum = 0;
18
             long min = 1000000000;
19
             long max = 0;
20
21 ▼
             while (in.hasNext()){
22
                 long n = in.nextLong();
                 sum += n;
23
24 🔻
                 if (min > n){
25
                     min = n;
26
27 ▼
                 if (max < n) {
28
                     max = n;
29
30
             }
31
                 in.close();
32
33
             System.out.println((sum-max) + " " + (sum-min));
34
35
    }
36
                                                                                                                   Line: 17 Col: 22
                       Test against custom input
                                                                                                        Run Code
                                                                                                                      Submit Code
1 Upload Code as File
```

Congrats, you solved this challenge! ✓ Test Case #0 ✓ Test Case #1 ✓ Test Case #2 ✓ Test Case #3 ✓ Test Case #4 Test Case #5 ✓ Test Case #6 ✓ Test Case #7 ✓ Test Case #8 ✓ Test Case #9 Test Case #10 ✓ Test Case #11 ✓ Test Case #12 ✓ Test Case #13 Next Challenge