# Mini-Max Sum



Problem Submissions Leaderboard 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.

**Example**

$arr = [1, 3, 5, 7, 9]$

The minimum sum is $1 + 3 + 5 + 7 = 16$ and the maximum sum is $3 + 5 + 7 + 9 = 24$. The function prints

```
16 24
```

**Function Description**

Complete the miniMaxSum function in the editor below.

miniMaxSum has the following parameter(s):

- arr: an array of $5$ integers

**Print**

Print two space-separated integers on one line: the minimum sum and the maximum sum of $4$ of $5$ elements.

**Input Format**

A single line of five space-separated integers.

**Constraints**

$1 \leq arr[i] \leq 10^9$

**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**

The numbers are $1$, $2$, $3$, $4$, and $5$. Calculate the following sums using four of the five integers:

1. Sum everything except $1$, the sum is $2 + 3 + 4 + 5 = 14$.
2. Sum everything except $2$, the sum is $1 + 3 + 4 + 5 = 13$.
3. Sum everything except $3$, the sum is $1 + 2 + 4 + 5 = 12$.
4. Sum everything except $4$, the sum is $1 + 2 + 3 + 5 = 11$.
5. Sum everything except $5$, the sum is $1 + 2 + 3 + 4 = 10$.

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

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```
 *
 * The function accepts INTEGER_ARRAY arr as parameter.
 */

void miniMaxSum(vector<int> arr) {
    int_fast64_t min = 0 ;
    int_fast64_t max = 0 ;
    sort(arr.begin() , arr.end());

    for(int i = 0 ; i <= 3 ; i++) {
        min += arr[i] ;
        max += arr[i+1] ;
    }

    cout << min << " " << max << endl;
}

int main()
{

    string arr_temp_temp;
    getline(cin, arr_temp_temp);

    vector<string> arr_temp = split(rtrim(arr_temp_temp));

    vector<int> arr(5);

    for (int i = 0; i < 5; i++) {
        int arr_item = stoi(arr_temp[i]);

        arr[i] = arr_item;
    }

    miniMaxSum(arr);

    return 0;
}

string ltrim(const string &str) {
    string s(str);

```

Line: 20 Col: 36

Upload Code as File  Test against custom input  Run Code  Submit Code

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34% 601/850


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- Test case 4
- Test case 5
- Test case 6

Compiler Message

```
Success
```

Input (stdin) Download

```
1 2 3 4 5
```

Expected Output Download

```
10 14
```