Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02_SCAN-PRINT
- PRACTICE-03_TYPES
- LAB-PRAC-02_SCAN-PRINT
  - Mr C goes on a diet
  - Permute Password
  - Escapes around Tutors
  - Amusing Fractions
  - P and C
  - Build a Rhombus
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  - Pick your Choice
  - Lego Safe
  - Race Car
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  - Numerical Flowers
- LAB-PRAC-01
- PRACTICE-04_COND
- BONUS-PRAC-02
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- PRACTICE-05_COND-LOOPS
- LAB-PRAC-04_COND
- LAB-PRAC-05_CONDLOOPS
- PRACTICE-07_LOOPS-ARR
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- LAB-PRAC-07_LOOPS-ARR
- LABEXAM-PRAC-01_MIDSEM
- PRACTICE-09_PTR-MAT
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- PRACTICE-10_MAT-FUN
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- PRACTICE-11_FUN-PTR
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- LABEXAM-PRAC-02_ENDSEM
- LAB-PRAC-13_STRUC-NUM
- LAB-PRAC-14_SORT-MISC

Amusing Fractions

LAB-PRAC-02_SCAN-PRINT

Amusing Fractions [20 marks]

Problem Statement
Let's start the day with some fraction arithmetic. You will be given two fractions as input. You are required to add and subtract the two fractions and display the integral part of both these values. For example, if the fractions are -10/2 and -3/4 then we have -10/2 + (-3/4) = -5.75 and -10/2 - (-3/4) = -4.25 and so your answers should be -5 and -4. Be careful -- as these examples demonstrate, the integral part is not found by either rounding up or down - the integral part is found by simply ignoring the fractional part of the number.

Caution

1. Do not use math.h or any header file other than stdio.h
2. Use only integer variables. No floats, doubles etc.
3. Fractions need not be provided to you in their lowest form i.e. the numerator and denominator may have common factors other than one.
4. The fractions we give may be negative, or else their sum or difference may be negative
5. We will never give any of the denominators to be zero so do not worry about divide-by-zero errors

HINTS:

1. Visible test case number 1 is there to confirm if you are giving output in the correct format or not. Be careful about extra spaces and lines.
2. Visible test case number 2 is there to check if you are performing integer arithmetic operations properly or not.

INPUT:
numerator1 denominator1 numerator2 denominator2
OUTPUT:
sum
difference

EXAMPLE:
INPUT
-10 2 3 -4
OUTPUT:
-5
-4

Grading Scheme:
Total marks: **[20 Points]**

There will be partial grading in this question. In each test case, 50% marks are for giving the correct sum and 50% marks will be for giving the correct difference i.e. if a test case is worth 2 points, 1 point is for correct sum and 1 point for correct difference.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if both answers are correct. Thus, if your sum is correct but difference is incorrect, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get 50% partial marks.

Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible test cases and 4 hidden test cases.

Start Solving! (/editor/practice/5952)