Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02_SCAN-PRINT
- PRACTICE-03_TYPES
- LAB-PRAC-02_SCAN-PRINT
- LAB-PRAC-01
- PRACTICE-04_COND
- BONUS-PRAC-02
- LAB-PRAC-03_TYPES
- PRACTICE-05_COND-LOOPS
- LAB-PRAC-04_COND
  - Trouble with Triangles
  - Ms- Mathematica
  - Pollution Problem
  - In or Out
  - Rick-s Number
  - Its Tax Time
  - The Toppers
  - Isotonic Regression
  - Super Leap Years
  - Make Room for Rectangles
  - Quadratic Quandry Revisited
  - Grade Grab
- LAB-PRAC-05_CONDLOOPS
- PRACTICE-07_LOOPS-ARR
- LAB-PRAC-06_LOOPS
- LAB-PRAC-07_LOOPS-ARR
- LABEXAM-PRAC-01_MIDSEM
- PRACTICE-09_PTR-MAT
- LAB-PRAC-08_ARR-STR
- PRACTICE-10_MAT-FUN
- LAB-PRAC-09_PTR-MAT
- LAB-PRAC-10_MAT-FUN
- PRACTICE-11_FUN-PTR
- LAB-PRAC-11_FUN-PTR
- LAB-PRAC-12_FUN-STRUC
- LABEXAM-PRAC-02_ENDSEM
- LAB-PRAC-13_STRUC-NUM
- LAB-PRAC-14_SORT-MISC

Ms- Mathematica

LAB-PRAC-04_COND

Ms. Mathematica [20 marks]

Problem Statement
Ms. Mathematica really loves numbers but some numbers are more loved than others. Currently, she likes complex numbers which have special real and imaginary coefficients. She needs your help to find out if a given complex number is her favorite or not.

You will be given a complex number n = a + bi in a format described below, with both the real and imaginary parts being **4-digit integers** and an integer m, on **two separate lines**. Your job is to output the following in **two different lines**

1. The sum of the digits of the real part a of the number n and the product of the digits of the imaginary part b of the number n. Both numbers should be output on the same line, **separated by a comma and a space**
2. If both the sum and product values you calculated above are divisible by m then print “Favorite" (without the quotes), else print "Not favorite" (without the quotes).

Caution

1. Be careful about extra/missing lines and extra/missing spaces.
2. Both the sum and the product should be output on the same line (the first line) and be separated by a single comma and a single space.
3. Output the sum and product as integers with no leading zeros or decimal points etc.
4. The four digit numbers we give you as a and b, may have zeros in their representation.

INPUT:
a + bi
m

OUTPUT:
sum, product
message

EXAMPLE:
INPUT
1234 + 5678i
5

OUTPUT:
10, 1680
Favorite

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

There will be partial grading in this question. There are two lines in your output. Printing each line correctly, in the correct order, carries 50% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

🍴 Start Solving! (/editor/practice/6051)