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
  - FIFA Fever
  - Matrix Math
  - The Tale of Three Lines
  - Fiery FIFA Fever
  - The Final Rational
  - Quadratic Quandary
  - FIFA Fractions
  - Digit Dilemma
  - Recursive Recharge
  - Breaking the Lego Safe
  - The Final Rational Revisited
  - Developing an interest in interest
- PRACTICE-05_COND-LOOPS
- LAB-PRAC-04_COND
- 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

Matrix Math

LAB-PRAC-03_TYPES

Matrix Math [20 marks]

Problem Statement
You are given two 3 x 3 floating point matrices A and B. The rows of the matrices will be given in different lines, one row in each line and there will be a blank line between the two matrices. The different entries of the matrix will be separated by a single space. Let's define matrices C and D as follows:
C = A + B
D = A x B
You have to print C and D as described in the output format. The elements of the output matrices should have only 2 digits beyond decimal point.

Caution

1. Be careful about extra/missing lines and extra/missing spaces.
2. Print each row of the matrices C and D on **separate lines**, with a single space between 2 matrix entries in the same row.
3. Include **two blank lines** between printing the matrices C and D.

HINT: To print a floating point number, we use the notation %f in printf statements. To print a floating point number to only 2 digits beyond the decimal point, use the notation %0.2f in your printf statements.

INPUT:
A11 A12 A13
A21 A22 A23
A31 A32 A33

B11 B12 B13
B21 B22 B23
B31 B32 B33

OUTPUT:
C11 C12 C13
C21 C22 C23
C31 C32 C33

D11 D12 D13
D21 D22 D23
D31 D32 D33

EXAMPLE:
INPUT
0 0 0
0 0 0
0 0 0

1 1 1
1 1 1
1 1 1

OUTPUT:
1.00 1.00 1.00
1.00 1.00 1.00
1.00 1.00 1.00

0.00 0.00 0.00
0.00 0.00 0.00
0.00 0.00 0.00

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

There will be partial grading in this question. Printing each line of the output (there will be total of 8 lines in your output) will carry equal weightage. 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.

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/6019)