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
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- PRACTICE-05_COND-LOOPS
  - Points on a Plane
  - A Tale of Two Circles
  - Build a Rhombus Revisited
  - Hello World Revisited
  - Crescendo
- 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
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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

Points on a Plane

PRACTICE-05_COND-LOOPS

You will be given the (x,y) coordinates of 4 points in a plane (all coordinates will be integers) X1, X2, P, Q. In the first line of the output, write down the equation of the line formed by the first two points X1 and X2. Your equation must be of the form

$$y = ax + b$$

unless the line is a vertical line in which case you should give the equation in the form

$$x = c$$

The numbers a, b, c must be rounded off to three decimal places. In the next line, write down one of the following labels depending on how the points P and Q behave with respect to the line you just constructed.

1. **Both On The Line** if both points P and Q lie on the line
2. **One On The Line** if one point is on the line and the other is not on the line
3. **Together** if P and Q lie on the same side of the plane but none are on the line
4. **Apart** if P and Q are on different sides of the plane but none are on the line

EXAMPLE:
INPUT
(0, 1) (2, 3) (10, 10) (20, 21)

OUTPUT
y = 1.000x + 1.000
One On The Line

Start Solving! (/editor/practice/6045)