

Write a program that, given two integers, two doubles as x and y coordinates of two points $p1(x1,y1)$ and $p2(x2,y2)$ on a two-dimensional plane as input, finds the mid-point $p3(x3,y3)$ of the line segment formed by $p1$ and $p2$ using the formula:

$$x3 = \frac{x1 + x2}{2} \text{ and } y3 = \frac{y1 + y2}{2}$$

Generic class **Point** has the following members.

- Instance variables x and y
- A constructor to initialize x and y
- A method `mid(Point p)` to return the mid-point of the line segment joining the current point to p
- A method that overrides the method `toString()` in the `Object` class to format the output

Class **Test** has the main method.

- The main method accepts the two input points. The first line of input will be two integers of point $p1$. The second line of input will be two doubles of point $p2$. It then invokes the method `mid` of one of the objects.

Sample Test Cases

Test Case 1

Input

2 3

2.2 4.2

Expected Output

(2.1,3.6)

Actual Output

Test Case 2

Input

7 8

5 6

Expected Output

(6.0,7.0)

Actual Output