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The Virtual Learning Environment for Computer Programming

Relationship between rectangles

X87831_en

```
Using the definitions

class Point:
    """attributes: x, y"""

class Rectangle:
    """attributes: width, height, corner"""

write a function

relationship_between_rectangles(r1, r2)
```

that returns *less than* if r1 is inside r2, *greater than* if r2 is inside r1, *overlap* if r1 and r2 overlap, *equal* if r1 and r2 are identical, and *disjoint* otherwise (if r1 and r2 do not share any point).

Input

The input consists of several pairs of rectangles (four non-negative integer numbers for each: the width, the height, and the coordinates of the lower-left corner).

Output

For each pair of rectangles, print their relationship as shown below.

Sample input	Sample output
2 1 2 1 6 3 0 0	less than
6 3 0 0 6 3 0 0	equal
6 3 0 0 2 1 2 1	greater than
6 3 0 0 6 3 2 1	overlap
6 3 0 0 6 3 6 3	overlap
2 1 0 0 6 3 0 0	overlap
6 3 0 0 2 1 6 0	overlap
6 3 0 0 2 1 0 3	overlap
6 3 0 0 2 1 8 0	disjoint
6 3 0 0 2 1 0 4	disjoint

Problem information

Author: Gabriel Valiente

Generation: 2019-11-21 12:47:54

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