
Relationship between rectangles

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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 1

```
2 1 2 1      6 3 0 0
6 3 0 0      6 3 0 0
6 3 0 0      2 1 2 1
6 3 0 0      6 3 2 1
6 3 0 0      6 3 6 3
2 1 0 0      6 3 0 0
6 3 0 0      2 1 6 0
6 3 0 0      2 1 0 3
6 3 0 0      2 1 8 0
6 3 0 0      2 1 0 4
```

Sample output 1

```
less than
equal
greater than
overlap
overlap
overlap
overlap
overlap
disjoint
disjoint
```

Problem information

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