

Rectangle Inclusion**X75652_en**

Write a function `@inclusion(x1, y1, x2, y2)@` that receives the dimensions of two rectangles $(x1, y1)$ and $(x2, y2)$ (all four numbers are strictly positive integers) and checks whether the first fits inside the second, the other way round, or none of both options. The function must return `"first inside second"`, `"second inside first"`, or `"none"` respectively. If two rectangles have the same size, are considered as `"first inside second"`.

Note that the rectangles may be rotated 90° if that makes the fitting possible

For example, the call `inclusion(6, 3, 4, 2)` corresponds to the rectangles with sizes 6×3 and 4×2 :

```
+-----+   +--+
|       |   +--+
+-----+
```

and the expected answer is `"second inside first"`.

The call `inclusion(3, 6, 4, 2)` corresponds to the rectangles with sizes 3×6 and 4×2 :

```
+--+
| |
| |   +--+
| |   +--+
| |
+--+
```

and the expected answer is also `"second inside first"`, since it would fit if we turned 90° any of them.

The call `inclusion(6, 3, 7, 2)` corresponds to the rectangles with sizes 6×3 and 7×2 :

```
+-----+   +-----+
|       |   +-----+
+-----+
```

and the expected answer is `"none"`, since no rectangle fits in the other, with or without 90° turn.

Finally, the call `inclusion(4, 2, 3, 6)` corresponds to the rectangles with sizes 4×2 and 3×6 :

```

      +--+
      | |
+--+  | |
+--+  | |
      | |
      +--+
```

and the expected answer is `"first inside second"`, since it would fit after a 90° turn.

Sample session

```
>>> inclusion(6,3,4,2)
second inside first
>>> inclusion(3,6,4,2)
second inside first
>>> inclusion(6,3,7,2)
none
>>> inclusion(4,2,3,6)
first inside second
```

Problem information

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