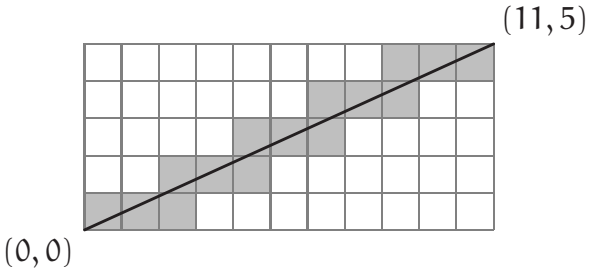
Xegment

Computer Science Society
Programming Contest
Fall 2010

You know that most video monitors use rasterized graphics, in which images are displayed using a grid of pixels. If you draw a diagonal line, it will appear as jagged stairlike lines. In this problem, we will assume that pixels are perfect unit squares whose corners are positioned at non-negative integer coordinates, and that a diagonal line segment from coordinate $(0, 0)$ to coordinate (x, y) is displayed. If the segment crosses a pixel, the pixel is turned on. If the segment does not cross a pixel or touches it at only one corner, the pixel is turned off. For example, the line segment from $(0, 0)$ to $(11, 5)$ would be drawn with 15 pixels turned on, as shown below.



Input Format

Each line of input contains two integers $0 < x, y \leqslant 10^6$, representing a diagonal line segment whose endpoints are $(0, 0)$ and (x, y).

Output Format

For each input line representing a line segment, output the number of pixels that would be turned on if the line segment were displayed using rasterized graphics, as shown in the output sample below.

Input Sample

```
11 5
3 3
2 5
10 10
9 10
```

Output Sample

```
15 pixels
3 pixels
6 pixels
10 pixels
18 pixels
```