# Equilibrium Point /\/\

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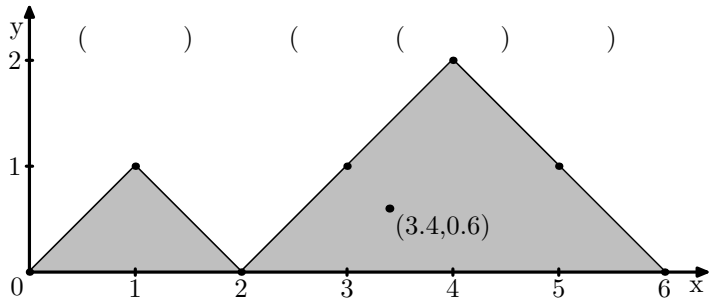
|---|---|
| Input file: | `standard input` |
| Output file: | `standard output` |
| Time limit: | 3 seconds |
| Memory limit: | 512 megabytes |

Consider a balanced bracket sequence $s$ with one type of brackets: '`(`' and '`)`'.

There is a common geometrical representation of such a sequence. Starting at the point $(0, 0)$, you draw a polyline, for each bracket moving along a vector $(1, 1)$ if it is an opening bracket, and along $(1, -1)$ if it is a closing bracket.




Consider an area between this curve and the line $y = 0$. It is a set of polygons. This area has its center of mass at some point $(x, y)$. Note that the center of mass might be outside of the area.

You are to solve the reverse problem. Given the length $n$ and a point $(x, y)$, find any balanced bracket sequence of length $n$ such that the center of mass of its geometrical representation is located at $(x, y)$.

## Input

The first line contains three numbers $n$, $x$, and $y$ ($n$ is an even integer, $2 \le n \le 36$; $0 < x, y < n$) — the length of the desired sequence and the coordinates of the desired center of mass.

It is guaranteed that $(x, y)$ is the center of mass of some balanced bracket sequence of length $n$, with Euclidean-distance error of no more than $10^{-9}$.

## Output

Output a balanced bracket sequence with brackets '`(`' and '`)`' of length $n$ such that the center of mass of its geometrical representation is located at the point $(x, y)$, with Euclidean-distance error of no more than $10^{-7}$.

## Example

| standard input | standard output |
|---|---|
| `6 3.4 0.6` | `()(())` |