

Problem C. Carpet Showcase

Time limit: 1 second
Memory limit: 256 megabytes

Rene is a designer of abstract carpets. The Rene's carpets are rectangles $n \times m$, where n and m — are natural numbers. Each carpet is divided into $n \times m$ identical unit squares.

Rene designs a carpet showcase at a furniture exhibition. The showcase is a horizontal rectangular area with sides $h \times w$, where h and w are natural numbers; the floor on the showcase is also divided into unit squares.

Renee wants the carpets to be displayed on the showcase neatly.

Rene believes that carpets are laid out neatly if the following rules are followed. Each carpet can lie on the floor or on another carpet, and each unit square of the carpet must be strictly above the unit square of the floor or carpet underneath it. Moreover, if one carpet lies on another carpet, then it must be entirely inside it and have a strictly smaller area.

Rene wants to display carpets with the maximum total area at the exhibition. Help him calculate the maximum total area of carpets that can be present at the exhibition and can be neatly laid out on the showcase.

Input

The only input line contains two natural numbers h and w — the sides of the area for the showcase ($1 \leq h, w \leq 10^6$).

Output

Print a single integer — what is the maximum total area of carpets that can be neatly laid out on the showcase.

Examples

standard input	standard output
1 2	4
2 2	12
3 2	22