You are given an N x M floor. You need to tile the whole floor using two types of tiles. They are given below:

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Both these tiles have a side length of 2. You can rotate these two tiles any way you want. Find the minimum number of tiles required to tile the whole floor.

**Input**

First line: Two integers, N and M (0 < N, M <= 1000,000,000).

**Output**

Minimum number of tiles required. If its not possible to tile the floor, print “Impossible”. See sample for clarification

|  |  |
| --- | --- |
| 2 2 | 1 |
| 2 3 | 2 |

Explanation:

In the first case, you can just use one tile of first type.

In the second case, you can use two tiles of second type. One of them in the given form and other one rotated to look like an inverse L.