Poisonous Chocolate (Bonus)

ZPRAC-16-17-Lab2

[Bonus Question]
Note - This question will be evaluated only if solutions of all 3 lab questions are submitted.

Amlan and Nirbhay are very competitive and always try to beat each other. To put an end to their battle, their friend Vikas designed a game of life for them in which the loser dies.

Vikas gives them a chocolate bar of $m \times n$ chocolate blocks. The top left corner block of the chocolate is poisonous. The game starts, and at each step, a player has to break the chocolate bar either vertically or horizontally and will eat that part of the chocolate bar which doesn't contain the poisonous block. The players play alternately. A player loses when he can't break the chocolate bar further i.e. only the poisonous block remains and he has to eat it (hence gets died).
As you know, Amlan and Nirbhay are very intelligent and will play each move rationally. They always make the best possible move.

Given m, n ($\leq 10^4$) and the information that Amlan always makes the first move, you need to output whether Nirbhay wins or loses.

Input:

Positive integers m and n

Output:
Output 1 if Nirbhay wins or 0 if he loses

Note - If you are able to find out the solution but unable to code it, discuss with any tutor present in the lab.

Example 1:
Input:
1 1
Output:
1
Explanation: Since chocolate bar is 1X1(only poisonous block), Amlan in the first move, has to eat it and Nirbhay gets won.

Example 2:
Input:
1 2
Output:

0

Explanation: Since chocolate bar is 1X2, Amlan in the first move, breaks it into two parts and eats the non-poisonous part. Then, in the second move, Nirbhay has no choice, he has to eat the remaining poisonous block and hence gets lost.