292. Nim Game

Description (?tab=Description) Submission (?tab=Submission)

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Total Accepted: **120663** Total Submissions: **220508** Difficulty: **Easy** Contributors: **Admin**

You are playing the following Nim Game with your friend: There is a heap of stones on the table, each
you take turns to remove 1 to 3 stones. The one who removes the last stone will be the winner. You wil
turn to remove the stones.

Both of you are very clever and have optimal strategies for the game. Write a function to determine wh
win the game given the number of stones in the heap.

For example, if there are 4 stones in the heap, then you will never win the game: no matter 1, 2, or 3 st
remove, the last stone will always be removed by your friend.

Hint:

1. If there are 5 stones in the heap, could you figure out a way to remove the stones such that you
   the winner?

Credits:

Special thanks to @jianchao.li.fighter (https://leetcode.com/discuss/user/jianchao.li.fighter) for adding t
and creating all test cases.

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Editorial Solution