MARATONA DE PROGRAMAÇÃO
InterFatecs

Problem B

Urinals

Source file: urinals.{ c | cpp | java }
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A very common behavior observed in male individuals is the choice of urinals inside public restrooms. In various cultures, male individuals prefer a free urinal whose neighbors are equally free. It seems that this is related to some sense of privacy when doing the famous "number 1". As we have recently seen a certain interest in unusual aspects of econometrics, there has even been a specific informal term to describe this problem: *International Choice of Urinal Protocol* https://blog.xkcd.com/2009/09/02/urinal-protocol-vulnerability. According to this very important protocol, the best scenario would be one in which between every male individual there is always a free toilet isolating the person from its nearest neighbor. It is clear that in situations where the Nature call is too strong the individual can ignore the protocol, probably at the cost of some psychological discomfort for their toilet neighbors.

Your goal in this problem is to determine, for a certain amount of concurrent urinal users, what would be the minimum quantity of urinals so that the best scenario described by the *International Choice of Urinal Protocol* is achieved.

Input

The input consists of an integer N ($1 \leq N \leq 500$), which indicates the number of people who wish to use an urinal at any given time.

Output

Print an integer corresponding to the minimum number of urinals required so that two people do not need to use neighboring urinals. Place a line break after the value.

Example of Input 1	Example of Output 1
1	1

Example of Input 2	Example of Output 2
2	3

Example of Input 3	Example of Output 3
42	83