

2549. Count Distinct Numbers on Board

Description

You are given a positive integer n , that is initially placed on a board. Every day, for 10^9 days, you perform the following procedure:

- For each number x present on the board, find all numbers $1 \leq i \leq n$ such that $x \% i == 1$.
- Then, place those numbers on the board.

Return *the number of **distinct** integers present on the board after 10^9 days have elapsed*.

Note:

- Once a number is placed on the board, it will remain on it until the end.
- $\%$ stands for the modulo operation. For example, $14 \% 3$ is 2 .

Example 1:

Input: $n = 5$

Output: 4

Explanation: Initially, 5 is present on the board.

The next day, 2 and 4 will be added since $5 \% 2 == 1$ and $5 \% 4 == 1$.

After that day, 3 will be added to the board because $4 \% 3 == 1$.

At the end of a billion days, the distinct numbers on the board will be 2, 3, 4, and 5.

Example 2:

Input: $n = 3$

Output: 2

Explanation:

Since $3 \% 2 == 1$, 2 will be added to the board.

After a billion days, the only two distinct numbers on the board are 2 and 3.

Constraints:

- $1 \leq n \leq 100$

