

Problem E. E- while loop

Time limit 2000 ms

Mem limit 262144 kB

Problem Statement

Takahashi loves numbers divisible by 2.

You are given a positive integer N . Among the integers between 1 and N (inclusive), find the one that can be divisible by 2 for the most number of times. The solution is always unique.

Here, the number of times an integer can be divisible by 2, is how many times the integer can be divided by 2 without remainder.

For example,

- 6 can be divided by 2 once: $6 \rightarrow 3$.
- 8 can be divided by 2 three times: $8 \rightarrow 4 \rightarrow 2 \rightarrow 1$.
- 3 can be divided by 2 zero times.

Constraints

- $1 \leq N \leq 100$

Input

Input is given from Standard Input in the following format:

N

Output

Print the answer.

Sample 1

Input	Output
7	4

4 can be divided by 2 twice, which is the most number of times among 1, 2, ..., 7.

Sample 2

Input	Output
32	32

Sample 3

Input	Output
1	1

Sample 4

Input	Output
100	64