Problem E. 3-smooth Numbers

Time limit 2000 ms **Mem limit** 1048576 kB

Problem Statement

You are given a positive integer N. If there are integers x and y such that $N=2^x3^y$, print Yes; otherwise, print No.

Constraints

- $1 \le N \le 10^{18}$
- *N* is an integer.

Input

The input is given from Standard Input in the following format:

N

Output

Print a single line containing \mbox{Yes} if there are integers x and y that satisfy the condition, and \mbox{No} otherwise.

Sample 1

Input	Output
324	Yes

For x=2,y=4, we have $2^x3^y=2^23^4=4\times 81=324$, so the condition is satisfied. Thus, you should print Yes .

Sample 2

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Input	Output
5	No

There are no integers x and y such that $2^x 3^y = 5$. Thus, you should print No.

Sample 3

Input	Output
32	Yes

For x=5,y=0, we have $2^x3^y=32\times 1=32$, so you should print Yes .

Sample 4

	Input	Output
3	37748736	Yes