C. Match Sticks

Limits 1s, 512 MB

Bob was playing with match sticks and discovered that he could create alphabets and numbers by arranging match sticks. He also found that he can quickly form arithmetic operators like addition (+), subtraction (−), and multiplication (×).

Now, Bob has created a game and asks Alice to play. Bob gives Alice N match sticks and sets the rule like that; if Alice can form an equal number of addition (+) and subtraction (−) operators and precisely one multiplication operator (×), then Alice wins.

Input

There will be several lines of input. Read until end of file (EOF). Each line of input contains an integer N ($4 < N < 100000$), the number of match sticks.

Output

For each N, print "Yes" if Alice wins, else "No" without the quotes. Each answer must be separated by space or be on a separate line.

Sample

Input	Output
5 6	Yes No

If we have 5 sticks, we can make exactly one multiplication (×), one addition (+) and one subtraction (−) operators.

If we have 6 sticks, we can make one multiplication (×) but not an equal number of addition (+) and subtraction (−) operators.