

A number N is called good if the sum of the factors less than N is equal to the number N . You're given a number N , now check if the number N

is good or not. Print "YES"(without quotes) if it's a good number, otherwise print "NO" (without quotes).

Input:

- First-line will contain the number N
- .

Output:

Print "YES"(without quotes) if N

is good number, otherwise print "NO" (without quotes).

Constraints

- $1 \leq N \leq 10^{10}$
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Sample Input 1:

6

Sample Output 1:

YES

Sample Input 2:

16

Sample Output 2:

NO

EXPLANATION:

- In the first example, sum of divisors less than 6 are 1, 2, 3, and $(1 + 2 + 3) = 6$.
- In the second example, 16 is not a good number as $(1 + 2 + 4 + 8) = 15$.