

Problem 2.2**Nitwitter**

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Overview: Check if a base ten number is a power of two.

Description: Nitwitter, the fastest growing microblogging site around, recently hired several aliens from the enchanted planet of Tarnia to market its services to the inhabitants of Tarnia. The fact that each alien only has two fingers and no mouths makes interspecies communication somewhat difficult. However, a group of industrious researchers at Nitwitter has developed a revolutionary method of passing colored tokens back and forth between the species to convey information.

Tokens are carefully stacked and packed into boxes before being shipped to the destination planet. For storage purposes, it is optimal to begin transportation for n tokens, where n is a power of two. In fact, if n were not a power of two, such transportation would be virtually impossible. As an example, 32 (i.e. 2^5) tokens could be easily transported, but sending 37 (i.e. $2^5 + 5$) tokens would be a daunting task that not even the brave of researchers at Nitwitter dare tackle.

Nitwitter needs your help to determine whether a given number of tokens could be easily sent to Tarnia. You should read in the proposed number n of tokens from the console, and output `yes` if n is an integral power of two, and `no` otherwise. Good luck!

Time Allocation: 1 second

Input: The input consists of a single integer n , signifying the number of proposed tokens Nitwitter desires to ship to Tarnia.

Output: The output should consist of a single lowercase word, either `yes` or `no`, indicating whether n is an integral power of two.

The output is to be formatted exactly like the sample output given below.

Assumptions: n will be an integer between 1 and 65,536, inclusive.
An integral power of two is defined as any integer m of the form 2^x , where x is an integer greater than or equal to 0.
All input will be valid.

Sample Input #1: 1

Sample Output #1: yes

Sample Input #2: 13

Sample Output #2: no