

Power Of Two

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given a number N . Determine whether N is **power of 2** or **not**.

Input

Only one line contains a number N ($1 \leq N \leq 10^{18}$).

Output

Print “**YES**” if N is power of **2** otherwise, print “**NO**”.

Examples

standard input	standard output
8	YES
10	NO