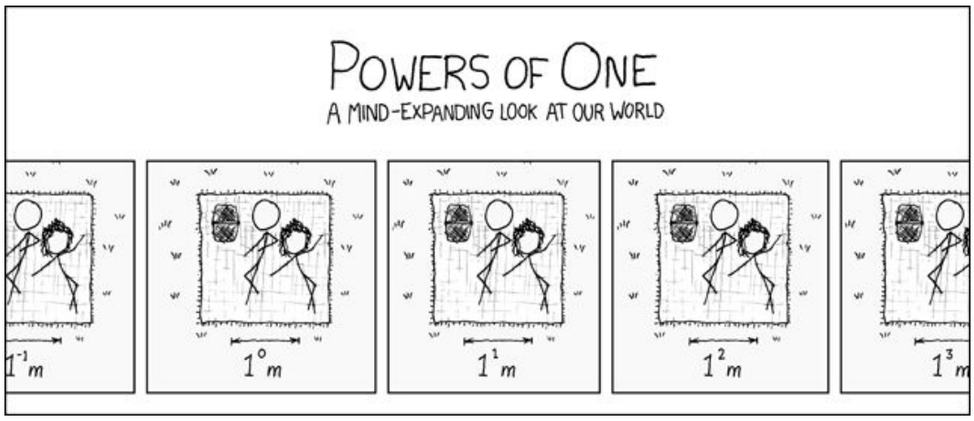
**Powers of N**




**Summary**

Is a given number *k* the result of taking an integer exponent of *n*? For example, is 9 a power of 3? Is 25 a power of 4? Yes and no, respectively.

**Description**

You will be provided two integers, *k* and *n*, each on a separate line of input. Your program must accurately determine if *k* is an integer power of *n*. This will be true if there is some non-negative integer *i* for which $k = n^i$. Your program is to output a single word, “YES” if *k* is a power of *n*, and “NO” otherwise.

**Input Constraints**

- Both *k* and *n* are integers
- $1 \leq k, n < 2^{32}$

**Examples**

| Input | Output |
|---|---|
| 25<br>5 | YES |
| 25<br>4 | NO |
| 20<br>2 | NO |