THE ARMSTRONG NUMBER PROBLEM:

An <u>Armstrong number</u> is a number that is the sum of its own digits each raised to the power of the number of digits.

For example:

- 9 is an Armstrong number, because 9 = 9^1 = 9
- 10 is *not* an Armstrong number, because $10! = 1^2 + 0^2 = 1$
- 153 is an Armstrong number, because: 153 = 1^3 + 5^3 + 3^3 = 1 + 125 + 27 = 153
- 154 is *not* an Armstrong number, because: 154 != 1^3 + 5^3 + 4^3 = 1 + 125 + 64 = 190

Write some code to determine whether a number is an Armstrong number.

Input (armstrong.txt)

9

10

153

154

Output

9 Yes

10 No

153 Yes

154 No