A number is considered **lucky** if it contains only the digits **4** and **7**. For example, numbers like `4`, `7`, `44`, `47`, `74`, and `77` are lucky, while `5`, `17`, and `467` are not.

Given a positive integer **n**, determine whether **n** is a lucky number or if it is divisible by at least one lucky number.

Input

A single line containing a positive integer **n** (`1 ≤ n ≤ 10^12`).

Output

Print `"YES"` if **n** is a lucky number or if **n** is divisible by at least one lucky number. Otherwise, print `"NO"`.

Subtasks

- **Subtask 1 (30 points):**
  - `1 ≤ n ≤ 10^4`
- **Subtask 2 (70 points):**
  - `1 ≤ n ≤ 10^12`

Examples 1

Input:
47

Output:
YES

Examples 2

Input:
16

Output:
NO