Valid Number

A valid number can be split up into these components (in order):

A decimal number or an integer.

(Optional) An 'e' or 'E', followed by an integer.

A decimal number can be split up into these components (in order):

(Optional) A sign character (either '+' or '-').

One of the following formats:

At least one digit, followed by a dot '.'.

At least one digit, followed by a dot '.', followed by at least one digit.

A dot '.', followed by at least one digit.

An integer can be split up into these components (in order):

(Optional) A sign character (either '+' or '-').

At least one digit.

For example, all the following are valid numbers: ["2", "0089", "-0.1", "+3.14", "4.", "-.9", "2e10", "-90E3", "3e+7", "+6e-1", "53.5e93", "-123.456e789"], while the following are not valid numbers: ["abc", "1a", "1e", "e3", "99e2.5", "--6", "-+3", "95a54e53"].

Given a string s, return true if s is a valid number.

Example 1:

Input: s = "0"

Output: true

Example 2:

Input: s = "e"

Output: false

Example 3:

Input: s = "."

Output: false

Example 4:

Input: s = ".1"

Output: true

Constraints:

1 <= s.length <= 20

s consists of only English letters (both uppercase and lowercase), digits (0-9), plus '+', minus '-', or dot '.'.