

Positive, negative or zero

Write a program that allows user to enter any integer named a and then checks that the number entered is positive, negative, or zero.

Example 1:

Please enter any integer: 2

2 is a positive number

Example 2:

Please enter any integer: -9

-9 is a negative number

Example 3:

Please enter any integer: 0

The number entered is zero

Input

Allow user input a number t.

Constraints

- $-100 < t \leq 100$

Output

check t is positive, negative or zero, show the result

Example

Input:

1

Output:

1 is a positive number