Daffodil number

Time Limit: 2000 ms Memory Limit: 65536 KB

The daffodil number is one of the famous interesting numbers in the mathematical world. A daffodil number is a three-digit number whose value is equal to the sum of cubes of each digit.

For example. 153 is a daffodil as $153 = 1^3 + 5^3 + 3^3$.

Input

There are several test cases in the input, each case contains a three-digit number.

Output

One line for each case. if the given number is a daffodil number, then output "Yes", otherwise "No".

Sample Input

153

610

Sample Output

Yes

No

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