

## Excellent Numbers (excellent)


Valerio was recently introduced to the concept of excellent numbers: a positive integer is considered *excellent* if its decimal representation only contains the digits 1 and 5, and it is divisible by 3.

For example, **15** and **111** are *excellent* numbers ( $15 = 5 \cdot 3 + 0$  and  $111 = 37 \cdot 3 + 0$ ), while **151** is not ( $151 = 50 \cdot 3 + 1$ ).



Figure 1: 1515 is considered by many an *Angel Number*<sup>1</sup> and also happens to be an *excellent* number!

Valerio is wondering if there exists at least one *excellent* number with exactly  $N$  digits. Help him by **finding one**, or by determining that there are no *excellent* numbers with that number of digits!

 Among the attachments of this task you may find a template file `excellent.*` with a sample incomplete implementation.

### Input

The first (and only) line contains the integer  $N$ .

### Output

You need to write a single line with an integer: an *excellent* number with  $N$  digits, if there exists any. If there are multiple solutions, you may print any.

Otherwise, if there is no such number, output  $-1$ .





### Constraints

- $1 \leq N \leq 1\,000\,000$ .

<sup>1</sup>An *Angel Number*, in Numerology, is a number with a predictable pattern that is believed to be a sign from the universe.

## Scoring

Your program will be tested against several test cases grouped in subtasks. In order to obtain the score of a subtask, your program needs to correctly solve all of its test cases.

- **Subtask 1** (0 points)      Examples.  

- **Subtask 2** (33 points)       $N \leq 7$ .  

- **Subtask 3** (33 points)       $N$  is even.  

- **Subtask 4** (34 points)      No additional limitations.  


## Examples

input	output
2	15

## Explanation

In the **first sample case** the number 15 is a valid *excellent* number. 51 is a correct answer, too.