

8322 Bank Card Verifier

Cafe Bazaar, the famous Iranian android market, is looking for creative software developers. A group of applicants are attending an interview, and the company wants to select the fastest developer who can code simple rules accurately. As a test, all applicants should quickly develop a bank card verifier that determines whether a payment card number is valid or not.

All payment card numbers are 16 digits long. The leftmost 6 digits represent a unique identification number for the bank who has issued the card. The next 2 digits determine the type of the card (e.g., debit, credit, gift). Digits 9 to 15 are the serial number of the card, and the last digit is used as a control digit to verify whether the card number is valid. Hence, if somebody enters the card number incorrectly, there is a high chance that a payment software can easily determine it.

For a valid card number, the last digit is selected in such a way that the following algorithm passes:

1. Label all digits from left to right by 1 to 16.
2. Multiply each odd-labeled digit by 2.
3. If the result for any digit is greater than 9, subtract 9 from it.
4. Sum the results of the previous step, and add to it the sum of all even-labeled digits.
5. If the result is a multiple of 10, the card number is valid; otherwise, it is invalid.

Your task is to read several card numbers from the input, and determine whether each one is a valid card number or not.

Input

There are multiple test cases in the input. Each test is given in one line consisting of four space-separated 4-digit strings.

The leftmost digit of the given card number is guaranteed to be non-zero. The input terminates with a line containing '0000 0000 0000 0000' that should not be processed.

Output

For each test case, output a line containing 'Yes' or 'No' depending on whether the card number is valid or not, respectively.

Sample Input

```
6104 3376 7866 1545
6104 3376 7866 1545
5022 2910 0140 7954
0000 0000 0000 0000
```

Sample Output

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Yes
No
Yes
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