Manasa loves Maths

You are given an integer N. Is there a permutation of digits of integer that's divisible by 8? A permutation of digits of integer N is defined as an integer formed by rearranging the digits of N. For example, if the number N = 123, then {123, 132, 213, 231, 312, 321} are the possible permutations.

Input Format

The first line contains an integer *T* i.e. number of test cases.
T lines follow, each containing the integer *N*.

Output Format

For each test case print YES if there exists one such re-arrangement of N such that it is divisible by 8 or NO if there isn't.

Constraints

1 <= T <= 45
$0 <= N <= 10^{110}$

Note

Re-arrangements of *10* are *{10, 01}* which boils down to *{10, 1}*.

Sample Input

```
2
61
75
```

Sample Output

```
YES
NO
```

Explanation

Test case #00: 16 is permutation of 61 which is divisible by 8.
Test case #01: None of permutation of 75, {57, 75}, are divisible by 8.