Lucky Four

Problem Code: **LUCKFOUR**

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Kostya likes the number **4** much. Of course! This number has such a lot of properties, like:

- Four is the smallest composite number;
- It is also the smallest Smith number;
- The smallest non-cyclic group has four elements;
- Four is the maximal degree of the equation that can be solved in radicals;
- There is four-color theorem that states that any map can be colored in no more than four colors in such a way that no two adjacent regions are colored in the same color;
- Lagrange's four-square theorem states that every positive integer can be written as the sum of at most four square numbers;
- Four is the maximum number of dimensions of a real division algebra;
- In bases 6 and 12, 4 is a 1-automorphic number;
- And there are a lot more cool stuff about this number!

Impressed by the power of this number, Kostya has begun to look for occurrences of four anywhere. He has a list of **T** integers, for each of them he wants to calculate the number of occurrences of the digit **4** in the decimal representation. He is too busy now, so please help him.

Input

The first line of input consists of a single integer **T**, denoting the number of integers in Kostya's list.

Then, there are **T** lines, each of them contain a single integer from the list.

Output

Output **T** lines. Each of these lines should contain the number of occurences of the digit **4** in the respective integer from Kostya's list.

Constraints

- $1 \le T \le 10^5$
- (Subtask 1): $0 \le$ Numbers from the list ≤ 9 - 33 points.

- (Subtask 2): **0** ≤ Numbers from the list ≤ 10^9 - 67 points.

Example

```
Input:
5
447474
228
6664
40
81

Output:
4
0
1
1
0
```

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Editorial:	https://discuss.codechef.com/problems/LUCKFOUR (https://discuss.codechef.com/problems/LUCKFOUR)
Tags:	Tags are hidden. Show temporarily Update this setting in edit profile (/users/thehavva/edit#additional_info)
Problem level:	Cakewalk
Date Added:	23-01-2015
Time Limit:	1 secs
Source Limit:	50000 Bytes
Languages:	CPP14, C, JAVA, PYTH 3.6, CPP17, PYTH, PYP3, CS2, ADA, PYPY, TEXT, PAS fpc, NODEJS, RUBY, PHP, GO, HASK, TCL, PERL, SCALA, LUA, kotlin, BASH, JS, LISP sbcl, rust, PAS gpc, BF, CLOJ, R, D, CAML, FORT, ASM, swift, FS, WSPC, LISP clisp, SQL, SCM guile, PERL6, ERL, CLPS, ICK, NICE, PRLG, ICON, COB, SCM chicken, PIKE, SCM qobi, ST, SQLQ, NEM

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