

Play with Digit Seven

Description

A natural number x is called a good number if one or two of the next two conditions is satisfied:

- 7 is a divisor of x .
- 7 is a digit of x .

Task

Write a program that:

- reads a number n from the standard input,
- computes the number of good numbers in range $[1, 10^n]$,
- writes the result to the standard output.

Solve the problem by at most 0.5kB of source code.

Input

The input begins with an integer t ($t \leq 210$), the number of test cases. t test cases follow.

For each test case, the first and only line contains an integer n ($1 \leq n \leq 500$).

Output

For each test case the output consists of one line that contains the answer.

Example

Sample input:

```
3
1
2
1
```

Sample output:

```
1
30
1
```