In this problem you have to count the number of great numbers of length n. Here a great number must have the following property:

- the number must be divisible by all of its decimal digits.

- it does not contain any digit greater than 6 (i.e. 15 is a valid great number but 17 is not).

For example 15 is such a great number because it is divisible by both 1 and 5 but 13 is not because it is not divisible by 3.

Input

The first line of the input file contains an integer T ($T \leq 40$) which denotes the total number of test cases. The description of each test case is given below:

An integer N ($1 \leq N \leq 40$).

Output

For each case you have to output the number of great numbers in a single line. Print the output *modulo* 1000007.

Sample Input

```
2
1
2
```

Sample Output

```
6
10
```