

NICE SEQUENCES

A nice sequence is a sequence of digits in which a digit d is placed at any index iff d is 0 or any divisor of d (except 1) has been placed already. First digit can be anything from 1 to 9.

Find the number of nice sequences of length n .

Input

Input consists of number of test cases t

Following t lines have a single line containing n as described in the problem statement.

Output

Print the number of nice sequences of length n modulo 1000000007 in a separate line .

Example

Input:

```
2
1
2
```

Output

```
9
23
```

Explanation :

For $n=2$ nice sequences are :

10,20,22,24,26,28,30,33,36,39,40,44,48 and so on !

Constraints:

$1 \leq n \leq 1000$