

Problem M

I Hate The Number Nine


Problem ID: nine

CPU Time limit: 1 second

Memory limit: 1024 MB

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How many positive d digit numbers exist that do not contain a nine?

Input

The first line of the input consists of a single integer, T , the number of test cases.

Each of the following T cases consists of a single integer d , the number of digits.

- $1 \leq T \leq 20$
- $1 \leq d \leq 10^{18}$



Output

For each test case, output the number of positive numbers with d digits that do not contain a nine. Since this number can be very large, output it modulo 1 000 000 007.

Sample Input 1

```
3
1
2
100
```

Sample Output 1

```
8
72
343393926
```