

Truncky Numbers

Asutosh is very passionate about numbers. he has found a new type of numbers and calls them 'truncky numbers'.

He has challenged his friend Shantanu to find the sum of first n truncky numbers. As shantanu is weak at programming,

help him to complete his challenge.

A Truncky number is defined as:-

1) sum of digits in the number is of the form $(5 \cdot k + 1)$ where $k = \text{number of digits}$.

2) absolute difference between any two digits in the number is either 0 or 1.

3) digits are in the non decreasing order.

Input

the first line contains T(number of test cases).Each test contains only one integer n.

Output

print in single line sum of first n truncky numbers modulo $10^9 + 7$.

Each output in new line.

CONSTRAINTS:

$T \leq 30$

$N \leq 10^{17}$

Example

Input:

1

2

Output:

62