

# Lucky Sequence Again

Lucky Numbers are those numbers made up of prime digits ( 2, 3, 5, 7 ) only . Lucky Numbers contain zero or more copy of these four digits. Lucky sequence is the sequence made of lucky numbers written in ascending order. Print the  $n^{\text{th}}$  number of the Lucky Sequence.

The first 20 numbers of the lucky sequence will be

**2,3,5,7,22,23,25,27,32,33,35,37,52,53,55,57,72,73,75,77.....**

## Input Format

The First line of the input file contains t which indicate the number of the test cases .Each of the following 't' lines contains an integer 'n' .

## Constraints

$t \leq 2000$

$n \leq 10^{10}$  (10 power 10)

## Output Format

Output the  $n^{\text{th}}$  element of the Lucky Sequence (one lucky number per line)

## Example

### Sample Input:

4  
1  
3  
10  
18

### Sample Output:

2  
5  
33  
73