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 nth 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 <= 2000 n <= 10^10 (10 power 10)

Output Format

Output the nth element of the Lucky Sequence (one lucky number per line)

Example

Sample Input:

18

Sample Output:

2 5

33

73