Problem B. Display The Number

Time limit 1000 ms
Mem limit 262144 kB

You have a large electronic screen which can display up to 998244353 decimal digits. The digits are displayed in the same way as on different electronic alarm clocks: each place for a digit consists of 7 segments which can be turned on and off to compose different digits. The following picture describes how you can display all 10 decimal digits:

As you can see, different digits may require different number of segments to be turned on. For example, if you want to display 1, you have to turn on 2 segments of the screen, and if you want to display 8, all 7 segments of some place to display a digit should be turned on.

You want to display a really large integer on the screen. Unfortunately, the screen is bugged: no more than n segments can be turned on simultaneously. So now you wonder what is the greatest integer that can be displayed by turning on no more than n segments.

Your program should be able to process t different test cases.

Input

The first line contains one integer t ($1 \le t \le 100$) — the number of test cases in the input.

Then the test cases follow, each of them is represented by a separate line containing one integer n ($2 \le n \le 10^5$) — the maximum number of segments that can be turned on in the corresponding testcase.

It is guaranteed that the sum of n over all test cases in the input does not exceed 10^5.

Output

For each test case, print the greatest integer that can be displayed by turning on no more than n segments of the screen. Note that the answer may not fit in the standard 32-bit or 64-bit integral data type.

Sample 1

Input	Output
2 3 4	7 11