**A Lucky Number**

Lucky numbers are those, which have only 4 and 7 in their digits. The first few lucky numbers are 4, 7, 44, 47, 74, 77, 444, 447 … etc. In this problem, given a length L, you have to print all the lucky numbers whose length is less than or equal to L.

**Input**

The first line of input contains an integer L. 0<L<17

**Output**

Print each lucky number.

|  |  |
| --- | --- |
| 2 | 4  7  44  47  74  77 |

**B. SQRT**

In this problem, you have to find the square root of an input number.

**Input**

The first line of input contains an integer T, represents the total number of test cases. Each of the next T lines contains a single integer N.

1<T<200

1<=N<=10000007

**Output**

For each input number N, you have to print the square root of that number of six digits precision.

**Note that you are not allowed to use any math.h functions in this problem.**

|  |  |
| --- | --- |
| 3  4  2  7 | 2.000000  1.414214  2.645751 |

**C. Find the Count**

In this problem, you are given a list of numbers L. After that there will be some queries. In each query, there will be an integer number X. For each query's X, you have to find how many times that input number exist in L. See the sample input and output for more clarifications.

**Input**

The first line of input contains an integer N and Q. The next line contains N space separated integer number. After that, each of the Q lines contains an integer X.

1<N<1000007

1<Q<1000007

1<X<10000007

**Output**

For each query, you just need to print the number of times that input number exists in the given list of integer.

|  |  |
| --- | --- |
| 10 5  1 5 1 7 2 30 7 2 1 4  7  1  10  2  4 | 2  3  0  2  1 |