Problem A. Lucky 7 in the Pocket

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

BaoBao loves number 7 but hates number 4, so he refers to an integer x as a "lucky integer" if x is divisible by 7 but not divisible by 4. For example, 7, 14 and 21 are lucky integers, but 1, 4 and 28 are not.

Today BaoBao has just found an integer n in his left pocket. As BaoBao dislikes large integers, he decides to find a lucky integer m such that $m \geq n$ and m is as small as possible. Please help BaoBao calculate the value of m.

Input

There are multiple test cases. The first line of the input is an integer T (about 100), indicating the number of test cases. For each test case:

The first and only line contains an integer n ($1 \leq n \leq 100$), indicating the integer in BaoBao's left pocket.

Output

For each test case output one line containing one integer, indicating the value of m.

Example

standard input	standard output
4 1 7 20 28	7 7 21 35