Divisors 2

Let N be a positive integer and d(N) be the number of positive divisors of N including 1 and N. Your task is to compute all N in [1,10⁶] for which d(N)>3 and if M divides N then d(M) divides d(N) too.

Input

None.

Output

To make the problem less output related write out only every 108-th of them, one per line.

Example