

Finding Square Roots

Problem Code: **FSQRT**

In olden days finding square roots seemed to be difficult but nowadays it can be easily done using in-built functions available across many languages .

Assume that you happen to hear the above words and you want to give a try in finding the square root of any given integer using in-built functions. So here's your chance.

Input

The first line of the input contains an integer T , the number of test cases. T lines follow. Each T contains an integer N whose square root needs to be computed.

Output

For each line of input output the square root of the input integer.

Constraints

$1 \leq T \leq 20$

$1 \leq N \leq 10000$

Input :

3

10

5

10000

Output :

3

2

100