

Find Root

Assignment 1

Computer Programming

Due date: 10 September, 2018

Description:

$$x^2 + \sqrt{x} = C \quad (1)$$

Find the root of above equation and you are given C as the input.

Input:

first line of input is T which denotes the number of testcases , and for the next T lines each contains a single double type number C.

Output:

Print for each C given in input the corresponding root of the equation with atleast 6 digits(precision) towards right side of decimal point.

Constraints

C is a number of double type which lies between 0 and 10^9 .

Sample Test Case

Input	Output
2	9.000000
84	3.500000
14.120828	

Note: for first test case where C=84 , x=9.000000 is a root as $9^2 + \sqrt{9} = 84$

for second test case where C=14.120828 , x=3.500000 is a root as $3.5^2 + \sqrt{3.5} = 14.120828$

also $\sqrt{x^2} = |x|$