**Square Divisors**

Show Topic Tags   

Given a number N.Your task is to print the no of divisors of number N which are perfect squares.

**Input :**  
The first line of input contains an integer T, denoting number of test cases.Then T test cases follow. The first line of each test case contains an integer N.  
  
**Output :**  
For each test case in a new line print the answer .

**Constraints :**  
1<=T<=10  
1<=N<=10^12

**Example:  
Input :**  
2  
36  
60

**Output :**  
4  
2

\*\*For More Examples Use Expected Output\*\*

<http://practice.geeksforgeeks.org/problems/square-divisors/0>

/\*

\* To change this template, choose Tools | Templates

\* and open the template in the editor.

\*/

package javaapplication244;

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.Collections;

import java.util.HashMap;

import java.util.List;

/\*\*

\*

\* @author Administrador

\*/

public class JavaApplication244 {

/\*\*

\* @param args the command line arguments

\*/

static boolean isPerfectSquare(int n){

if((int) Math.sqrt(n) \* (int) Math.sqrt(n) == n) {

return true;

}

return false;

}

public static void main(String[] args) throws IOException {

// TODO code application logic here

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(br.readLine());

while(t-- > 0) {

int n = Integer.parseInt(br.readLine());

int ps =0;

for(int i =1; i<=Math.sqrt(n); i++) {

if(n%i==0) {

if(isPerfectSquare(i)) {

ps++;

}

if(i != n/i){

//ps++;

if(isPerfectSquare(n/i)) {

ps++;

}

}

}

}

System.out.println(ps);

}

}

}