

Counting Factors

Jojo is learning about factors in mathematics. To Jojo's knowledge, factors of a number are those that divides the number without leaving any remainders. At the end of the day, the teacher gave him T random integers, denoted by N. Help Jojo find the number of unique factors for each N.

Format Input

The first line of the input will contain T, the number of test cases. The next T lines will contain N.

Format Output

For each test case output "Case #X: Y" where X is the case number, and Y is the number of factors of N.

Constraints

- $1 \le T \le 20$
- $1 \le N \le 10^8$

Sample Input (standard input)

2 8 12

Sample Output (standard output)

Case #1: 4
Case #2: 6

Explanation

There are 4 divisors for 8, in which are 1,2,4, and 8. There are 6 divisors for 16, in which are 1,2,3,4,6, and 12.

[©] School of Computer Science - BINUS, 2020. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probihited. For those who violated this disclaimer, academic sanctioned can be enforced.



Counting Factors

Jojo sedang mempelajari tentang faktor di matematika. Sepengetahuan Jojo, faktor pembagi adalah angka-angka yang dapat membagi tanpa sisa. Di akhir hari, sang guru memberikan Jojo T integer acak, diwakilkan oleh N. Bantulah Jojo menghitung banyaknya faktor pembagi yang unik dari setiap N yang diberikan.

Format Input

Baris pertama berisikan T, banyaknya N yang diberikan. T baris berikutnya berisikan N pada setiap barisnya.

Format Output

Untuk setiap test case outputkan "Case #X: Y" dimana X adalah nomor test case, dan Y adalah banyaknya faktor dari N.

Constraints

- $1 \le T \le 20$
- $1 < N < 10^8$

Sample Input (standard input)

Sample Output (standard output)

Case #1: 4
Case #2: 6

Explanation

Angka 8 memiliki 4 faktor, antara lain 1,2,4 dan 8. Angka 12 memiliki 6 faktor, antara lain 1,2,3,4,6, dan 12.

[©] School of Computer Science - BINUS, 2020. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probihited. For those who violated this disclaimer, academic sanctioned can be enforced.