

TCS CodeVita™ Season 12

MockVita questions have been rolled over as
Practice questions.
Register now to participate.
Unite in the arena. Prepare for victory.

[Register Now!](#)

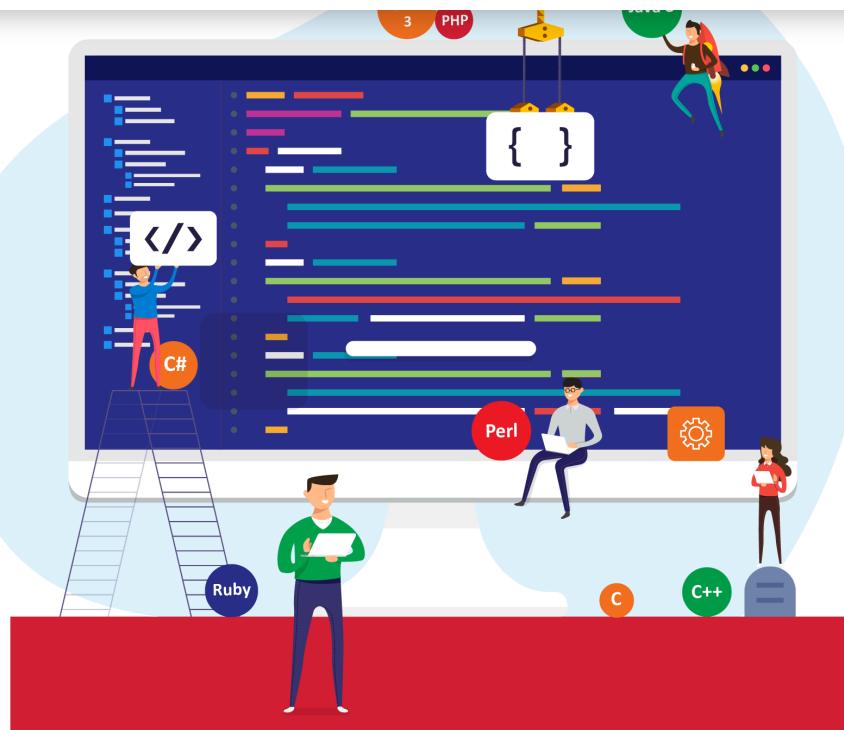
 6**Hours** to prove your mettle 20000

USD in prize money

 1

Global Ranking List to top coders

ABOUT US



Get ready to unlock the world of programming excitement with CodeVita!

Launched in 2012, TCS CodeVita is a global programming competition designed to identify top coders around the world. It's a dynamic contest that unites people from diverse backgrounds and cultures, shattering boundaries. The "Guinness Book of World Records" listed TCS CodeVita as 'The world's largest programming contest' with registrations from 98 countries/regions, proving it as a true global phenomenon.

In Season 11, participation soared to 444k+ contestants, representing 3,500+ institutes. Imagine participants from 10 regions engaging in an electrifying battle during the grand finale!

This year, we are "United by Code", celebrating a global community bound by the shared passion for programming. This season 12 promises more thrilling challenges and unforgettable experiences, highlighting the unity and diversity of coders worldwide.

Are you intrigued? Brace yourself for another extraordinary journey with TCS CodeVita, where coding transcends boundaries.



What's in it for students?

- Top 3 coders to win total prize money of USD 20,000
- Chance to explore exciting careers* with one of the world's most powerful brands
- Chance to compete with some of the best coders in the world
- Platform to showcase your programming skills
- Finalists stand a chance to travel to India for the season 12 live grand finale experience

*as applicable in the respective geographies



Eligibility

Current graduation or post-graduation students who are

- Studying in any stream of science or engineering
- Expecting to complete their course in the year of 2025, 2026, 2027 or 2028
- From any recognized institute across the globe

THE JOURNEY

Journey of a thousand miles begins with one step.

— Lao Tzu



Registration

To get started, click on the register button.



MockVitas

MockVitas are just like actual rounds to give demo of the actual contest.



Rounds

Clear the actual rounds to move further in your CodeVita journey.

SAMPLE QUESTIONS

On A Cube

Sorting Boxes

Sport Stadium

Water Cistern

Square Free Numbers

Codu and Sum Love

Obstacle Game

In the theory of numbers, square free numbers have a special place. A square free number is one that is not divisible by a perfect square (other than 1).

Problem Description



(other than 1). Thus 72 is divisible by 36 (a perfect square), and is not a square free number, but 70 has factors 1, 2, 5, 7, 10, 14, 35 and 70. As none of these are perfect squares (other than 1), 70 is a square free number.

For some algorithms, it is important to find out the square free numbers that divide a number. Note that 1 is not considered a square free number.

In this problem, you are asked to write a program to find the number of square free numbers that divide a given number.

Input

The only line of the input is a single integer N which is divisible by no prime number larger than 19

Output

One line containing an integer that gives the number of square free numbers (not including 1)

Constraints

$N < 10^9$

Difficulty Level

Simple

Time Limit (secs)

1

Examples

Example 1

Input

20

Output

N=20

If we list the numbers that divide 20, they are

1, 2, 4, 5, 10, 20

1 is not a square free number, 4 is a perfect square, and 20 is divisible by 4, a perfect square. 2 and 5, being prime, are square free, and 10 is divisible by 1,2,5 and 10, none of which are perfect squares. Hence the square free numbers that divide 20 are 2, 5, 10. Hence the result is 3.

Example 2

Input

72

Output

3

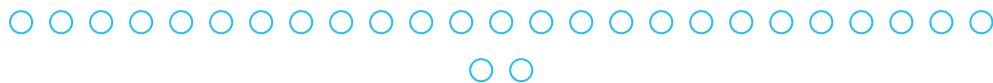
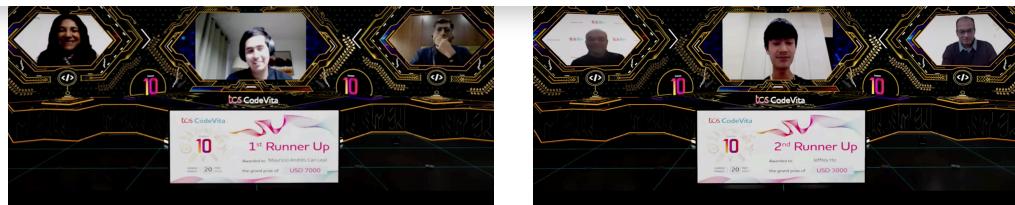
Explanation

N=72. The numbers that divide 72 are

1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72

1 is not considered square free. 4, 9 and 36 are perfect squares, and 8,12,18,24 and 72 are divisible by one of them. Hence only 2, 3 and 6 are square free. (It is easily seen that none of them are divisible by a perfect square). The result is 3

GALLERY



FREQUENTLY ASKED QUESTIONS

In doubt? Don't worry! Check out our Frequently Asked Questions enclosed below.

How do I register and login for the contest?

What if I accidentally delete my Microsoft Authenticator account?

Can I go back to the welcome page after starting to answer the coding problems?

Do I have to attempt the questions in serial order?

Where can I see the list of languages and compilers with their version?

If I move to question no. 2 without submitting question 1, does the timer continue for Question 1?

Where can I check the status of questions submitted by me?

If I close my browser will the codes written be saved on the system?

How long before a session will expire?

I closed my browser without logging out. I am unable to login.

What is the purpose of Code Attribution?

What do different answer statuses mean?

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