https://course.acciojob.com/idle?question=71891482-69b9-4bd3-a1ae-1945179ee04f

- EASY
- Max Score: 30 Points

Square root of a number

Given an integer x, find the square root of x.

If x is not a perfect square, then return floor(√x).

Expected Time Complexity: O(log N)

Expected Auxiliary Space: O(1)

Note: Try Solving the question without using sqrt Function.

Input Format

The only line contains an integer x.

Output Format

Print the square root of x.

Example 1

Input

```
5
```

Output

```
2
```

Explanation

Since, 5 is not a perfect square, floor of square root of 5 is 2.

Constraints

- **1 ≤ x ≤ 10^7**

Topic Tags

- **Math**
- **Binary Search**

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
        public static void main (String[] args) throws java.lang.Exception
        {
                //your code here
      Scanner s=new Scanner(System.in);
      int n=s.nextInt();
      int sr=0;
      for(int i=0;i*i<=n;i++)
        sr=i;
        System.out.print(sr);
        }
}
```