

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

### E. Spider Man Festival

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

After Spider-Man has join the marvel team, they made a big festival for him. They ordered many pizza because most of them like it. Unfortunately, Hulk who is one of the team members was very hungry. Therefore, he ate all the pizza except one. Unlikely, it was 2 AM so they couldn't order pizza again.



However, Tony Stark suggested to divide the pizza to get  $n$  slices. He wants the slices to be exactly **the same size and shape**. If he couldn't, some of the attendance will get mad and go home without eating.

All the heroes were very hungry. Therefore, He wants to cut the pizza with **minimum** of straight cuts. A cut is a straight segment, it might have ends **inside** or **outside** the pizza.

Can you help Tony Stark to find the minimum number of straight cuts.

#### Input

Only one line contains an integer  $n$  ( $1 \leq n \leq 10^{18}$ ) — the number of slices needed.

NOTE: The circular pizza has to be sliced into  $n$  pieces.

#### Output

A single integer — the number of straight cuts Tony Stark needs

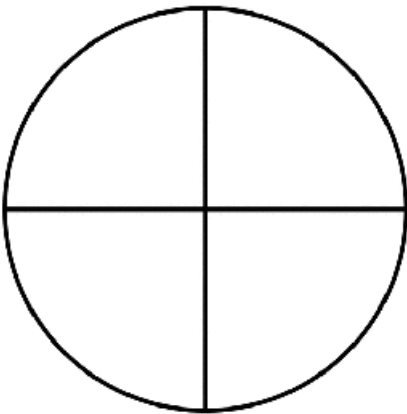
#### Examples

input	Copy
4	
output	Copy
2	

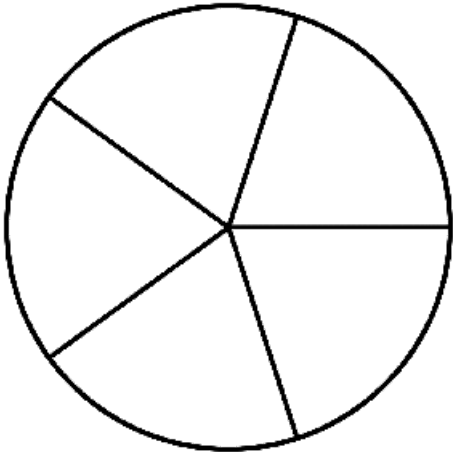
input	Copy
5	
output	Copy
5	

#### Note

To cut the round pizza into quarters one has to make two cuts through the center with angle 90° between them.



To cut the round pizza into five equal parts one has to make five cuts.



**ICPC Assiut Advanced Newcomers 2023**

Private

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→ **Group Contests**

- ICPC Assiut Advanced Newcomers 2023 Contest 5
- ICPC Assiut Advanced Newcomers 2023 Contest 4
- ICPC Assiut Advanced Newcomers 2023 Contest 3
- ICPC Assiut Advanced Newcomers Practice #1
- ICPC Assiut Advanced Newcomers 2023 Contest 2
- ICPC Assiut Advanced Newcomers 2023 Onsite Contest 2
- ICPC Assiut Advanced Newcomers 2023 Contest 1
- ICPC Assiut Advanced Newcomers 2023 Onsite Contest 1

**ICPC Assiut Advanced Newcomers 2023 Contest 1**

Finished

Practice

→ **Virtual participation**

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ **Submit?**

Language: GNU G++20 11.2.0 (64 bit, w

Choose file: 

Choose File

 No file chosen

Submit

→ Last submissions		
Submission	Time	Verdict
<a href="#">214677929</a>	Jul/21/2023 02:59	Accepted
<a href="#">214677825</a>	Jul/21/2023 02:56	Accepted
<a href="#">214677689</a>	Jul/21/2023 02:51	Accepted
<a href="#">214677658</a>	Jul/21/2023 02:49	Wrong answer on test 9