1 Square root

Description

Write a program that reads a number and calculates and prints its square root.

- If the number is invalid or negative, print `Invalid number`.
- In all cases finally print `Good bye`. Use `try-catch-finally` block.

Input

- On the only line you will receive a real number

Output

- Print the square root of the number or `Invalid number` on the first line
  - Use `3` digits of precision
- Print `Good bye` on the second line

Constraints

- Time limit: 0.1s
- Memory limit: 16MB

Sample tests

Input	Output
number	Invalid number Good bye
4	2.000 Good bye

-3.14	Invalid number Good bye
17	4.123 Good bye

2 Enter numbers

Description

Write a method `ReadNumber(int start, int end)` that enters an integer number in a given range `( start, end )`.

- If an invalid number or non-number text is entered, the method should throw an exception. Using this method write a program that enters `10` numbers: `a1, a2, ..., a10`, such that `1 < a1 < ... < a10 < 100`

Input

- You will receive 10 lines of input, each consisted of an integer number
  - `a1`
  - `a2`
  - `...`
  - `a10`

Output

- Print `1 < a1 < ... < a10 < 100`
  - Or `Exception` if the above inequality is not true

Constraints

- Time limit: 0.1s

- Memory limit: 16MB

Sample tests

Input	Output
5 7 15 29 46 47 60 70 89 98	1 < 5 < 7 < 15 < 29 < 46 < 47 < 60 < 70 < 89 < 98 < 100
87 10 29 28 43 58 95 41 2 46	Exception
5 11 20 27 49 41 52 81 89 99	Exception

3 Read file contents

Description

Write a program that enters file name along with its full file path (e.g. `C:\WINDOWS\win.ini`), reads its contents and prints it on the console. Find in MSDN how to use `System.IO.File.ReadAllText(...)`. Be sure to catch all possible exceptions and print user-friendly error messages.

4 Download file

Description

Write a program that downloads a file from Internet (e.g. Ninja image) and stores it the current directory. Find in Google how to download files in C#. Be sure to catch all exceptions and to free any used resources in the finally block.