



ICPC North America Regionals 2019

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ICPC Pacific Northwest Regional Contest

ICPC PACIFIC NORTHWEST REGION PRACTICE CONTEST



NOVEMBER 9, 2019



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For the Pacific Northwest Regional Contest, the important versions are as follows:

- Linux: Ubuntu 18.04 LTS (64-bit)
- Desktop: GNOME
- Editors: vi/vim, gvim, emacs, gedit, geany, kate
- Java: OpenJDK 11
- C, C++: gcc 7.4
- Python: Pypy7.7.1 implementing Python 3.6
- Kotlin: 1.3.50
- C#: Mono 7.8.4
- Eclipse 4.13
- IntelliJ 2019.2.2
- Code::Blocks: 17.12-1
- VSCode: 1.39.2

This is similar to World Finals, except at the present time World Finals will not support C#, will be using CPython3 instead of PyPy3, and will not support VSCode.



Problem A

Title Cost

You are head of operations at FlixNet, and you are responsible for transmitting just the title of movies to consumers. All movie titles on FlixNet are a single word and consist only of alphabetic characters.

The aggregate cost for transmitting a particular title is just equal to the number of letters in that title, except that your interweb service preventer has agreed to cap that cost at a given (floating point) value.

Given the title of a movie and the value of that cap, calculate your cost to transmit that movie title to your consumers.

Input

The input is a single line containing the name of the movie s and the cap on the cost c . The name of the movie will contain between 1 and 30 characters, inclusive, and consist solely of uppercase or lowercase letters. The cost will be a floating point value with $0 \leq c \leq 100$.

Output

Output a single floating point value, which is the minimum of the length of the title and the cap on the cost. Your solution will be judged correct if it is within $1e-8$ absolute or relative error of the correct answer.

Sample Input 1

GoneWithTheWind 13.341

Sample Output 1

13.341

Sample Input 2

Gigi 93.7

Sample Output 2

4

Sample Input 3

PieHard 3.14159265358979323846

Sample Output 3

3.14159265358979

Solutions

C++. Note the need to use `setprecision` on `cout`.

```
#include <iostream>
#include <iomanip>
#include <string>
```



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```
int main() {  
    std::string s ;  
    double f ;  
    std::cin >> s >> f ;  
    auto r = std::min((double)s.size(), f) ;  
    std::cout << std::setprecision(15) << r << std::endl ;  
}
```



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Java.

```
import java.util.* ;
public class Practice {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in) ;
        String s = sc.next() ;
        double f = sc.nextDouble() ;
        double r = Math.min(s.length(), f) ;
        System.out.println(r) ;
    }
}
```

Python. We are only supporting Python 3 this year.

```
toks = input().split(" ")
f = float(toks[1])
r = min(len(toks[0]), f)
print(r)
```

C. Note the printf format specifier.

```
#include <stdio.h>
#include <string.h>
int main() {
    char s[2048+1] ;
    double f ;
    scanf("%2048s %lg", s, &f) ;
    double r = (strlen(s) > f ? f : strlen(s)) ;
    printf("%.17lg\n", r) ;
}
```

C#. Standard floating point output format works fine.

```
using System ;
public class Practice {
    public static void Main(string[] args) {
        String[] input = Console.ReadLine().Split(' ') ;
        double f = Convert.ToDouble(input[1]) ;
        double r = (input[0].Length > f ? f : input[0].Length) ;
        Console.WriteLine(String.Format("{0}", r)) ;
    }
}
```

Kotlin. Standard floating point output format works fine.



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```
import java.util.*
fun main(args:Array<String>) = with(Scanner(System.`in`)) {
    val s=next()
    val f=nextDouble()
    val r=if (s.length > f) f else 0.0+s.length
    println(String.format("%.17g",r))
}
```