Lab: Basic Syntax

Please submit your solutions (source code) of all below-described problems in Judge

1. Student Information

You will be given 3 lines of input – **student name (string)**, **age (integer number)**, and **average grade (floating-point number)**. Your task is to print all the info about the student in the following format, where **grade is formatted with 2 digits**:

"**`Name: {student name}, Age: {student age}, Grade: {student grade}`**".

Examples

Input	Output
John 15 5.40	Name: John, Age: 15, Grade: 5.40
Steve 16 2.50	Name: Steve, Age: 16, Grade: 2.50
Marry 12 6.00	Name: Marry, Age: 12, Grade: 6.00

2. Passed or Failed

Write a program that takes as an input a **grade (floating-point number)**.

Prints:

- "**`Passed!`**" if the grade is **equal or more than 3.00**
- "**`Failed!`**" if the grade is **lower than 3.00**

Input

The **input** comes as a single double number.

Output

The **output** is either "**`Passed!`**" if the grade is **more than 2.99**, otherwise, you should print "**`Failed!`**".

Examples

Input	Output
5.32	Passed!

Input	Output
2.36	Failed!

3. Month Printer

Write a program that takes an **integer** from the console and prints the corresponding **month**.

If the number **is more than 12** or **less than 1** print "**`Error!`**".

Input

You will receive a **single integer** on a **single line**.

Output

If the number is within the boundaries, print the corresponding month, otherwise, print "`Error!`".

Examples

Input	Output
2	February

Input	Output
13	Error!

4. Foreign Languages

Write a program that prints the language that a given country speaks. You can receive only the following combinations:

- English **is spoken** in **England** and **USA**
- Spanish **is spoken** in **Spain**, **Argentina** and **Mexico**
- For the others we should print "**unknown**"

Input

You will receive a **single country name** on a **single line**.

Output

Print the **language**, which the country **speaks**, or if it is **unknown** for your program, print **"unknown"**.

Examples

Input	Output
USA	English

Input	Output
Germany	unknown

5. Divisible by 3

Write a program that prints all the numbers (on separate line) from **1 to 100**, which are **divisible by 3**. You have to use a single `for` loop. The program should not receive input.

6. Sum of Odd Numbers

Write a program that prints the next **n odd numbers** (starting from 1) and on the **last row** prints the **sum of them**.

Input

On the first line, you will receive a number – **n**. This number shows how many **odd numbers** you should print.

Output

Print the next **n** odd numbers, starting from **1**, separated by **new lines**. On the last line, print the **sum** of these numbers.

Constraints

- **n** will be in the interval **[1…100]**

Examples

Input	Output
5	1 3 5 7 9 Sum: 25

Input	Output
3	1 3 5 Sum: 9

7. Multiplication Table

You will receive an **integer** as input from the console. Print the **10 times table** for this integer. See the examples below for more information.

Output

Print every row of the table in the following format:

`{theInteger} X {times} = {product}`

Constraints

- The integer will be in the interval **[1…100]**

Examples

Input	Output
5	5 X 1 = 5 5 X 2 = 10 5 X 3 = 15 5 X 4 = 20 5 X 5 = 25 5 X 6 = 30 5 X 7 = 35 5 X 8 = 40 5 X 9 = 45 5 X 10 = 50

Input	Output
2	2 X 1 = 2 2 X 2 = 4 2 X 3 = 6 2 X 4 = 8 2 X 5 = 10 2 X 6 = 12 2 X 7 = 14 2 X 8 = 16 2 X 9 = 18 2 X 10 = 20

8. Even Number

Take as an input an even number and **print its absolute value** with a message: "**`The number is: {absoluteValue}`**". If the number is odd, print "**`Please write an even number.`**" and continue reading numbers.

Examples

Input	Output
1 3 6	Please write an even number. Please write an even number. The number is: 6

Input	Output
-6	The number is: 6