

# 1 Sum of 3 numbers

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## Description

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Write a program that reads 3 real numbers from the console and prints their sum.

## Input

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- On the first line, you will receive the number a
- On the second line, you will receive the number b
- On the third line, you will receive the number c

## Output

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Your output should consist only of a single line - the sum of the three numbers.

## Constraints

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- a, b and c will always be valid real numbers between -1000 and 1000, inclusive
- Time limit: 0.1s
- Memory limit: 16MB

## Sample tests

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Input	Output
1 2 3	6
-2 0 3	1

5.5	30.1
4.5	
20.1	

## 2 Company info

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### Description

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- A company has name, address, phone number, fax number, web site and manager. The manager has first name, last name, age and a phone number.
- Write a program that reads the information about a company and its manager and prints it back on the console.

info	input
Company name:	Telerik Academy
Company address:	31 Al. Malinov, Sofia
Phone number:	+359 888 55 55 555
Fax number:	
Web site:	<a href="http://telerikacademy.com/">http://telerikacademy.com/</a>
Manager first name:	Nikolay
Manager last name:	Kostov
Manager age:	25

Manager phone:	+359 2 981 981
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## Input

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- You will each piece of information about the company on a separate line, in the same order as in the example
  - Company name
  - Company address
  - Phone number
  - Fax number
  - Web site
  - Manager first name
  - Manager last name
  - Manager age
  - Manager phone

## Output

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- Print the information the same way as shown in the sample test. Make sure that you print "(no fax)" if an empty line is passed as fax number.

## Constraints

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- The input will always be in the described format
- Only the fax number field can be empty, all other fields will have at least one symbol
- Time limit: 0.1s
- Memory limit: 16MB

## Sample tests

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Input	Output
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Telerik Academy 231 Al. Malinov, Sofia +359 888 55 55 555  <a href="http://telerikacademy.com/">http://telerikacademy.com/</a> Nikolay Kostov 25 +359 2 981 981	Telerik Academy Address: 231 Al. Malinov, Sofia Tel. +359 888 55 55 555 Fax: (no fax) Web site: <a href="http://telerikacademy.com/">http://telerikacademy.com/</a> Manager: Nikolay Kostov (age: 25, tel. +359 2 981 981)
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## 3 Circle

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### Description

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Write a program that reads from the console the radius  $r$  of a circle and prints its perimeter and area, rounded and formatted with 2 digits *after* the decimal point.

### Input

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- On the only line of the input you will receive the radius of the circle -  $r$

### Output

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- You should print one line only: the perimeter and the area of the circle, separated by a whitespace, and with 2 digits precision

### Constraints

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- The radius  $r$  will always be a valid and positive real number
- Time limit: 0.1s
- Memory limit: 16MB

### Sample tests

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Input	Output
2	12.57
	12.57
3.5	21.99
	38.48

## 4 Number Comparer

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### Description

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Write a program that gets two numbers from the console and prints the greater of them.

### Input

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- On the first two lines you will receive the two numbers, A and B

### Output

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- On the only line print the larger of the two numbers
  - \*Try implementing it without using if-statements

### Constraints

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- The input will always be valid and in the described format.
- The numbers A and B will always be valid real number
- Time limit: 0.1s
- Memory limit: 16MB

### Sample tests

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Input	Output
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5 6	6
10 5	10
0 0	0
-5 -2	-2
1.5 1.6	1.6

## 5 Quadratic Equation

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### Description

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Write a program that reads the coefficients  $a$ ,  $b$  and  $c$  of a quadratic equation  $ax^2 + bx + c = 0$  and solves it (prints its real roots).

### Input

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- On the first three lines, you will receive the coefficients  $a$ ,  $b$ , and  $c$ , each on a separate line in the same order

### Output

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- If two different real roots exist, print them on two separate lines
  - Print the smaller root on the first line
- If only one real root exists, print it on the only output line
- If no real root exists, print the string "no real roots"
- The roots, should they exist, must be printed with precision *exactly* two digits after the floating point

## Constraints

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- The input will always consist of valid real numbers in the range  $[-1000, 1000]$  and will follow the described format
- Time limit: 0.1s
- Memory limit: 16MB

## Sample tests

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Input	Output
2 5 -3	-3.00 0.50
-1 3 0	0.00 3.00
-0.5 4 -8	4.00
5 2 8	no real roots

## 6 Sum of 5 numbers

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### Description

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Write a program that reads 5 integer numbers from the console and prints their sum.

### Input

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You will receive 5 numbers on five separate lines.

## Output

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Your output should consist only of a single line - the sum of the 5 numbers.

## Constraints

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- All 5 numbers will always be valid integer numbers between -1000 and 1000, inclusive
- Time limit: 0.1s
- Memory limit: 16MB

## Sample tests

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Input	Output
1 2 3 4 5	15
-1 2 -3 4 10	12
0 0 0 0 0	0



# 7 Numbers from 1 to N

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## Description

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Write a program that reads an integer number N from the console and prints all the numbers in the interval  $[1, n]$ , each on a single line.

## Input

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- On the only line you will receive the number N

## Output

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- You should print the numbers from 1 to N, each on a separate line

## Constraints

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- $1 \leq N < 1000$
- N will always be a valid integer number
- Time limit: 0.1s
- Memory limit: 16MB

## Sample tests

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Input	Output
3	1 2 3
5	1 2 3 4 5

1	1
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## 8 Sum of N Numbers

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### Description

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Write a program that enters a number N and after that enters more N numbers and calculates and prints their sum.

- *Note: You may need to use a for-loop.*

### Input

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- On the first line, you will receive the number N
- On each of the next N lines, you will receive a floating-point number

### Output

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- On must output only one number - the sum of the N numbers

### Constraints

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- $1 \leq N \leq 200$
- All numbers will be valid floating-point numbers in the range  $[-1000, 1000]$
- Time limit: 0.1s
- Memory limit: 16MB

### Sample tests

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Input	Output
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3 20 60 10	90
5 2 -1 -0.5 4 2	6.5
1 1	1

## 9 Fibonacci Numbers

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### Description

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Write a program that reads a number N and prints on the console the first N members of the Fibonacci sequence (at a single line, separated by comma and space - ", ") : 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, ....

### Input

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- On the only line you will receive the number N

### Output

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- On the only line you should print the first N numbers of the sequence, separated by ", " (comma and space)

### Constraints

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- $1 \leq N \leq 50$
- N will always be a valid positive integer number

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

## Sample tests

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Input	Output
1	0
3	0, 1, 1
10	0, 1, 1, 2, 3, 5, 8, 13, 21, 34

# 10 Interval

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## Description

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Write a program that reads two positive integer numbers N and M and prints how many numbers exist between them such that the remainder of the division by 5 is 0.

## Input

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- On the first two lines you will receive two integers - N on the first and M on the second.

## Output

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- Output a single value - the amount of numbers divisible by 5 without remainder.

## Constraints

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- $0 \leq N \leq M \leq 2000$
- Time limit: 0.1s

- Memory limit: 16MB

## Sample tests

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Input	Output	Explanation
6 11	1	10
20 37	3	25, 30, 35
2 2	0	think why