

Carry on?

Write a program by using the loop example that asks "Shall we carry on?" until the user inputs the string "no".

Sample output

Shall we carry on?

yes

Shall we carry on?

ye

Shall we carry on?

y

Shall we carry on?

no

Programming exercise:

Are we there yet?

Write a program, according to the preceding example, that asks the user to input values until they input the value 4.

Sample output

Give a number:

5

Give a number:

744

Give a number:

22

Give a number:

-1

Give a number:

4

Only positives

Write a program that asks the user for numbers. If the number is negative (smaller than zero), the program prints for user "Unsuitable number" and asks the user for a new number. If the number is zero, the program exits the loop. If the number is positive, the program prints the number to the power of two.

Sample output

Give a number:

5

25

Give a number:

4

16

Give a number:

-3

Unsuitable number

Give a number:

1

1

Give a number:

0

Number of Numbers

Write a program that reads values from the user until they input a 0. After this, the program prints the total number of inputted values. The zero that's used to exit the loop should not be included in the total number count.

Example output of the program:

Sample output

Give a number:

5

Give a number:

22

Give a number:

9

Give a number:

-2

Give a number:

0

Number of numbers: 4

Number of negative numbers

Write a program that reads values from the user until they input a 0. After this, the program prints the total number of inputted values that are negative. The zero that's used to exit the loop should not be included in the total number count.

Example output of the program:

Sample output

Give a number:

5

Give a number:

22

Give a number:

9

Give a number:

-2

Give a number:

0

Number of negative numbers: 1

Programming exercise: Sum of Numbers

Write a program that reads numbers from the user until the user inputs a number 0. After this the program outputs the sum of the numbers. The number zero does not need to be added to the sum, even if it does not change the results.

Example output of the program:

Sample output

Give a number:

5

Give a number:

22

Give a number:

9

Give a number:

-2

Give a number:

0

Sum of the numbers: 34

Number and sum of numbers

Write a program that asks the user for input until the user inputs 0. After this the program prints the amount of numbers inputted and the sum of the numbers. The number zero does not need to be added to the sum, but adding it does not change the results.

You need two variables to keep track of the information. Use one for keeping track of the numbers inputted and other for keeping track of the sum

Example output of the program:

Sample output

Give a number:

5

Give a number:

22

Give a number:

9

Give a number:

-2

Give a number:

0

Number of numbers: 4

Sum of the numbers: 34

Average of numbers

Write a program that asks the user for input until the user inputs 0. After this, the program prints the average of the numbers. The number zero does not need to be counted to the average. You may assume that the user inputs at least one number.

The average of the numbers can be calculated by dividing the sum of numbers with the amount of the numbers

Example output of the program:

Sample output

Give a number:

5

Give a number:

22

Give a number:

9

Give a number:

-2

Give a number:

0

Average of the numbers: 8.5

Average of positive numbers

Write a program that asks the user for input until the user inputs 0. After this, the program prints the average of the positive numbers (numbers that are greater than zero).

If no positive number is inputted, the program prints "Cannot calculate the average"

Below a few examples of the programs output

Sample output

```
3
5
1
-3
0
3.0
```

Sample output

```
0
Cannot calculate the average
```

Sample output

```
-3
1
0
1.0
```

Sample output

```
1
1
0
1.0
```

Repeating, breaking and remembering (5 parts)

Next, we'll implement a program one piece at a time. This is always strongly recommended when coding.

Note: the tests might fail a correct solution. This is a known bug that will be fixed in the future. In the meantime, you can avoid the error by printing "Give numbers:" without **any** spaces after ':'

Reading

Implement a program that asks the user for numbers (the program first prints "Write numbers: ") until the user gives the number -1. When the user writes -1, the program prints "Thx! Bye!" and ends.

Sample output

Give numbers:

5

2

4

-1

Thx! Bye!

Sum of numbers

Extend the program so that it prints the sum of the numbers (not including the -1) the user has written.

Sample output

Give numbers:

5

2

4

-1

Thx! Bye!

Sum: 11

Sum and the number of numbers

Extend the program so that it also prints the number of numbers (not including the -1) the user has written.

Sample output

Give numbers:

5

2

4

-1

Thx! Bye!

Sum: 11

Numbers: 3

Average of numbers

Extend the program so that it prints the mean of the numbers (not including the -1) the user has written.

Sample output

Give numbers:

5

2

4

-1

Thx! Bye!

Sum: 11

Numbers: 3

Average: 3.6666666666666666

Even and odd numbers

Extend the program so that it prints the number of even and odd numbers (excluding the -1).

Sample output

Give numbers:

5

2

4

-1

Thx! Bye!

Sum: 11

Numbers: 3

Average: 3.666666666666

Even: 2

Odd: 1