1. **FizzBuzz task.**

Write a program that displays numbers from 1 to 100. If the number is a multiple of 3, the program should display the word Fizz instead, and if the number is a multiple of 5, the word Buzz. If the number is a multiple of both 3 and 5, then the program should print the word FizzBuzz

1. **Find min. and max. value.**

There is a list:

numbers = [1, 2, '0', '300', -2.5, 'Dog', True, 0o1256, None]

Convert the elements of the list to type int(). Find the minimum and maximum value.

1. **Letters Count.**

There is a text:

Python is an interpreted high-level programming language for general-purpose programming. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespace. It provides constructs that enable clear programming on both small and large scales. In July 2018, the creator Guido Rossum stepped down as the leader in the language community after 30 years.

Python features a dynamic type system and automatic memory management. It supports multiple programming paradigms, including object-oriented, imperative, functional and procedural, and has a large and comprehensive standard library.

Python interpreters are available for many operating systems. CPython, the reference implementation of Python, is open source software and has a community-based development model, as do nearly all of Python's other implementations. Python and CPython are managed by the non-profit Python Software Foundation.

Determine which letter appears most often in this text and how many times does the word 'Python' appear in this text?

Notes:

* ignore the case of letters, i.e. 'A' = 'a'
* ignore punctuation marks and special characters (quotes, dashes)
* ignore spaces and newlines

1. **File size conversion.**

Implement a function that takes the file size in bytes and converts it into a readable format: Byte, Kilobyte, Megabyte, Gigabyte.

Example:

def file\_size(size\_in\_bytes):

# implement me

return '12.6Mb'

Notes:

* Limiting the function to Gigabytes is good enough.
* String Format examples:

<https://docs.python.org/3/library/string.html#format-examples>

Answer the question:

* How many Gigabytes in sys.maxsize ?

Check yourself:

assert file\_size(19) == '19.0B'

assert file\_size(12345) == '12.1Kb'

assert file\_size(1101947) == '1.1Mb'

assert file\_size(572090) == '558.7Kb'

assert file\_size(999999999999) == '931.3Gb'

1. **Multiples of 3 and 5. Find the best algorithm.**

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Find the sum of all the multiples of 3 or 5 below 100000000.

source: <https://projecteuler.net/problem=1>