

Python FASTA GC Calculator

Write a Python program called `gc.py` that takes a single positional argument which should be a file. Die with a warning if the argument is not a file. For each line in the file, print the line number and the percentage of the characters on that line that are a “G” or “C” (case-insensitive).

Expected behavior

```
$ ./gc.py
usage: gc.py [-h] FILE
gc.py: error: the following arguments are required: FILE
$ ./gc.py foo
"foo" is not a file
$ ./gc.py samples/sample1.txt
1: 9%
2: 19%
3: 19%
4: 22%
5: 32%
6: 21%
```

Test Suite

A passing test suite looks like the following:

```
$ make test
python3 -m pytest -v test.py
===== test session starts =====
platform darwin -- Python 3.7.3, pytest-4.3.1, py-1.8.0, pluggy-0.9.0 -- /Users/kyclark/anaconda3/bin/python3
cachedir: .pytest_cache
rootdir: /Users/kyclark/work/python/practical_python_for_data_science/ch05-python-strings-1
plugins: remotedata-0.3.1, openfiles-0.3.2, doctestplus-0.3.0, arraydiff-0.3
collected 4 items

test.py::test_usage PASSED [ 25%]
test.py::test_bad_input PASSED [ 50%]
test.py::test_good_input1 PASSED [ 75%]
test.py::test_good_input2 PASSED [100%]

===== 4 passed in 0.30 seconds =====
```