
funwithmaths

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CHAPTER 1

About this

Fun with maths is just an experiment about me learning algebra and Python. No intention to create a production ready library. Just for fun.

2.1 License:

2.1.1 The MIT License (MIT)

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2.1.2 Any questions?

Please, do not hesitate contact me at fernando.porres@gmail.com

2.2 Help:

The most efficient way to discover what does thi package do is to launch all unit tests and take a look at tests names.

```

pytest -m unit -v \
    --junitxml=output/xunit-reports/xunit-result.xml \
    --cov-report html:output/coverage/html \
    --cov-report xml:output/coverage/coverage.xml \
    --cov-report annotate:output/coverage/annotate \
    --cov=funwithmaths/ tests/

>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_non_matrix_object_is_not_
↳square PASSED
↳ [ 2%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x1_is_square PASSED
↳ [ 5%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x2_is_not_square_
↳PASSED
↳ [ 7%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_2x1_is_not_square_
↳PASSED
↳ [ 10%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_2x2_is_square PASSED
↳ [ 12%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_diag_of_no_matrix_object_
↳PASSED
↳ [ 15%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_diag_of_no_square_matrix_
↳PASSED
↳ [ 17%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_diag_of_matrix_1x1 PASSED
↳ [ 20%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_diag_of_matrix_2x2 PASSED
↳ [ 22%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_tr_of_no_matrix_object PASSED
↳ [ 25%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_tr_of_no_square_matrix PASSED
↳ [ 27%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_tr_of_matrix_1x1 PASSED
↳ [ 30%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_tr_of_matrix_2x2 PASSED
↳ [ 32%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_subdiag_of_no_matrix_object_
↳PASSED
↳ [ 35%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_subdiag_of_no_square_matrix_
↳PASSED
↳ [ 37%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_subdiag_of_matrix_1x1 PASSED
↳ [ 40%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_subdiag_of_matrix_2x2 PASSED
↳ [ 42%]

```

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```

>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_subdiag_of_matrix_3x3 PASSED
↳
↳ [ 45%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_superdiag_of_no_matrix_object
↳ PASSED
↳ [ 47%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_superdiag_of_no_square_matrix
↳ PASSED
↳ [ 50%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_superdiag_of_matrix_1x1
↳ PASSED
↳ [ 52%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_superdiag_of_matrix_2x2
↳ PASSED
↳ [ 55%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_superdiag_of_matrix_3x3
↳ PASSED
↳ [ 57%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_transpose_of_no_matrix_object
↳ PASSED
↳ [ 60%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_transposed_of_matrix_1x2
↳ PASSED
↳ [ 62%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_transposed_of_matrix_2x1
↳ PASSED
↳ [ 65%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_transposed_of_matrix_3x3
↳ PASSED
↳ [ 67%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_non_matrix_object_is_not_
↳ symmetrical PASSED
↳ [ 70%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x2_is_not_symmetrical
↳ PASSED
↳ [ 72%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x1_is_symmetrical
↳ PASSED
↳ [ 75%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_4x4_is_symmetrical
↳ PASSED
↳ [ 77%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_4x4_is_not_symmetrical
↳ PASSED
↳ [ 80%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_non_matrix_object_is_not_
↳ antisymmetrical PASSED
↳ [ 82%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x2_is_not_
↳ antisymmetrical PASSED
↳ [ 85%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_4x4_is_antisymmetrical
↳ PASSED
↳ [ 87%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_4x4_is_not_
↳ antisymmetrical PASSED
↳ [ 90%]

```

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```
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_non_matrix_object_can_not_be_
↳negated PASSED                                     ↳
↳                                                    ↳ [ 92%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x1_negative PASSED ↳
↳                                                    ↳
↳                                                    ↳ [ 95%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_1x2_negative PASSED ↳
↳                                                    ↳
↳                                                    ↳ [ 97%]
>>> tests/unit/algebra/test_matrix.py::TestMatrix::test_matrix_4x4_negated PASSED
```

CHAPTER 3

Indices and tables

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- `modindex`
- `search`