README

January 26, 2021

1 Activity 03: Python as a Calculator

https://asu-compmethodsphysics-phy494.github.io/ASU-PHY494//2021/01/26/03_HelloWorld/#activity-python-as-a-calculator

Create a file `solution.py` in which you evaluate the following mathematical expressions and assign them to variables `a`, `b`, …

$$a = -1 + 2 \tag{1}$$
$$b = 102 - 201 \tag{2}$$
$$c = 12345678987654321 \times 9876543210123456789 \tag{3}$$
$$d = 3/2 \tag{4}$$
$$e = \frac{1}{1 - 0.9^2} \tag{5}$$
$$f = 1 + \frac{2}{1} + \frac{2^2}{1 \cdot 2} + \frac{2^3}{1 \cdot 2 \cdot 3} + \frac{2^4}{1 \cdot 2 \cdot 3 \cdot 4} \tag{6}$$
$$g = -3^4 \tag{7}$$
$$h = 2 - 5.5 \times 10^{-7} \tag{8}$$
$$i = 1.672621898 \times 10^{-27} \times (3 \times 10^8)^2 \tag{9}$$
$$j = \sqrt{2} \tag{10}$$
$$k = \sqrt{-1} \tag{11}$$
$$l = (1 + 2i) + (-2 + i) \tag{12}$$
$$m = \frac{1 + 2i}{2 - i} \tag{13}$$
$$\tag{14}$$

1.1 Testing

Run the tests locally with

```
pytest
```

In order to perform autograding, `git push` your changes.

1.2 Example

The first line in `solution.py` should be

[ ]:
```
a = -1 + 2
```