Project 2

Clarifications/Corrections

- Sep 11: Updated main.ipynb: Updated q18 statement for more clarification
- Sep 13: Fixed test.py to work on machines where Jupyter is run with `py -m jupyter notebook`

Overview

In this project, you'll learn about types, operators, and boolean logic. To start, create a `p2` directory, and download `main.ipynb` and `test.py` to that directory (IMPORTANT: use the same process to download that you used for P1, which involves left-clicking the files and then right-clicking the "Raw" button).

You will change `main.ipynb` and hand it in. You should not change `test.py`, and you should not hand it in.

After you've downloaded both files to `p2`, open a terminal window and use `cd` to navigate to that directory. You will likely need to review the steps you used to cd to `p1` for the previous project, then adapt those steps for `p2`. To make sure you're in the correct directory in terminal, type `ls` and make sure you see `main.ipynb` and `test.py` listed.

Now run the following command:

```
python test.py
```

You should see the following output:

```
Summary:
  Test 1: PASS
  Test 2: no outputs in an Out[N] cell
  Test 3: PASS
  Test 4: no outputs in an Out[N] cell
  Test 5: no outputs in an Out[N] cell
  Test 6: no outputs in an Out[N] cell
  Test 7: no outputs in an Out[N] cell
  Test 8: no outputs in an Out[N] cell
  Test 9: no outputs in an Out[N] cell
  Test 10: found 3001 but expected 301
  Test 11: found :):):) but expected :):):):):):):):):):)
  Test 12: found 777777 but expected 42
  Test 13: found 25 but expected 125
  Test 14: no outputs in an Out[N] cell
  Test 15: found True but expected False
  Test 16: found False but expected True
  Test 17: found False but expected True
  Test 18: found 3 but expected True
```

```
  Test 19: found False but expected True
  Test 20: no outputs in an Out[N] cell

TOTAL SCORE: 10.00%
```

This means if you turn in main.py now, you'll get 10% for your score. Pretty good for having done nothing yet, no?

You would get 10% because there are 20 problems, each worth 5%, and we have done problems 1 and 3 for you. You can see this because the output above says "PASS" by them. Your goal is to get more points by getting test.py to print "PASS" by more problems. In some cases, you can see there is no answer in the original notebook (when it says `no outputs in an Out[N] cell`), and in other cases you need to make a change to correct a wrong answer (e.g., when it says `found 25 but expected 125`).

Now let's open a second terminal window (we want one to run Jupyter and one to run the tests). In the second one, perform the same steps to navigate to `p2` (again checking with `ls`). Now run `jupyter notebook` (or, if that doesn't work, try `python -m jupyter notebook`, or perhaps `python3 -m jupyter notebook`).

Try solving the second question. Then do a `Kernel` > `Restart & Run All`. If that looks good, save your work, switch to your other terminal, and run the tests. Make sure you're scoring 15% before proceeding to the other questions.

Have fun, and run test.py often to track your progress!