Programming Problem Set #1
Amendment

General comments:

The rubric at the back indicates points for commenting. We didn't cover commenting sufficiently, so the commenting has been removed from the rubric. Question 4 has been removed. The weights in the rubric have been adjusted.

1) Sample output for `factor.py`:

```
5 is a multiple of 5!
7 is a multiple of 7!
10 is a multiple of 5!
13 is a multiple of 13!
14 is a multiple of 7!
15 is a multiple of 5!
20 is a multiple of 5!
21 is a multiple of 7!
25 is a multiple of 5!
26 is a multiple of 13!
28 is a multiple of 7!
30 is a multiple of 5!
35 is a multiple of 5 and 7!
39 is a multiple of 13!
40 is a multiple of 5!
42 is a multiple of 7!
45 is a multiple of 5!
49 is a multiple of 7!
50 is a multiple of 5!
52 is a multiple of 13!
55 is a multiple of 5!
56 is a multiple of 7!
60 is a multiple of 5!
63 is a multiple of 7!
65 is a multiple of 5 and 13!
70 is a multiple of 5 and 7!
75 is a multiple of 5!
77 is a multiple of 7!
78 is a multiple of 13!
80 is a multiple of 5!
84 is a multiple of 7!
85 is a multiple of 5!
90 is a multiple of 5!
91 is a multiple of 7 and 13!
95 is a multiple of 5!
98 is a multiple of 7!
100 is a multiple of 5!
```

2) The output for `fib.py` should be just a single number. If you run:

   ```
   python fib.py 4
   ```

   It should output:

   ```
   3
   ```

3) Sample output for `temperature.py`:

   ```
   0°F = -17.78°C
   20°F = -6.67°C
   40°F = 4.44°C
   60°F = 15.56°C
   80°F = 26.67°C
   100°F = 37.78°C
   120°F = 48.89°C
   140°F = 60.00°C
   160°F = 71.11°C
   180°F = 82.22°C
   200°F = 93.33°C
   220°F = 104.44°C
   240°F = 115.56°C
   260°F = 126.67°C
   280°F = 137.78°C
   300°F = 148.89°C
   ```

4) We didn't cover the required material about strings in python being lists, so this question (`palindrome.py`) has been **removed from the problem set**.

5) Output for `perfect.py` should look like:

   ```
   1 + 2 + 4 + 7 + 14 = 28
   ```

   Except it should be 3-digit perfect numbers, not 2-digit like shown above.

Submission:

You should create a private repo to store your 4 programs on GitHub. Add my username (`wesleycox-unr`) as a collaborator to the repo so that I can grade your submissions. In the repo on GitHub, click on Settings > Collaborators. Then add my username and click "Add collaborator"

Submit the GitHub repo URL on Canvas.

Grading:

The problem set will be graded using the rubric provided below

	Task	Evaluation Score: Missing = 0; Inadequate = .25; Average = .5; Proficient = .75; Excellent = 1	Weight	Score
factor.py	Prints out message for a single factor		0.05	5%
	Prints all combination messages		0.1	10%
	Correct output for numbers between 0 to 100		0.1	10%
fib.py	Checks input argument validity before use		0.1	10%
	Output is correct		0.1	10%
	Uses command line argument in calculation		0.05	5%
temperature.py	Prints out entire conversion range from 0 to 300		0.05	5%
	Conversion is correct		0.1	10%
	Two decimal places for all Celsius data		0.1	10%
perfect.py	Calculates all factors for each number		0.1	10%
	Correctly tests perfectness		0.1	10%
	Prints all correct output		0.05	5%
Grade				100%