The purpose of this lab is to give you practice working with format strings.

## **Your Mission**

Grab a copy of lab8.py from Blackboard: you will need to make a series of modifications to this file. The unmodified version of the file is included on the next page.

This file contains a series of assignment statements involving string formatting, such as the following:

```
answers[0] = "#{3}#".format(one, two, three, four)
```

Each of these assignment statements is preceded by a comment that explains how the data should be formatted. Your task is to modify the slot descriptions as necessary to accomplish that formatting objective: in many cases, you'll need to change the index in addition to adding formatting directives.

In each case, the **only modifications you should make** are in the **slot descriptions**; in the example above, the slot description is {3}. **Do not change the parameters to format** or anything else outside of the slot descriptions.

**Verifying your answers:** The file has been set up so that you can simply run the script, and answers will be printed out to the screen. I encourage you to test things out as you go.

## What and How to Submit

You do not need to submit this lab through Blackboard.

**Instead:** Once you've verified your answers, print out your modified lab8.py and hand it in. (Make sure you've included your name and version of the course.)

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```
# <Your name here: >
# CPS 300/500 (please indicate)
# create a 12-element list to contain our answers
answers = [1]*12
four = ""
one = 1234.56789
t.wo = 2.68
three = "october"
# display one in a field of width 15, left justified
answers[0] = "#{3}#".format(one, two, three, four)
# display one in a field of width 15, centered
answers[1] = "#{3}#".format(one, two, three, four)
# display one with 20 significant digits
answers[2] = "20 sig digs: {3}".format(one, two, three, four)
# display one with 4 decimal places
answers[3] = "4 dec places: {3}".format(one, two, three, four)
# display both two and three (in that order),
   in fields of width 10 that are right justified
answers [4] = \#{3}\#{3}\#. format (one, two, three, four)
# display both three and two (in that order),
```

```
in fields of width 5 that are left justified
answers[5] = \#{3}\#{3}\#. format (one, two, three, four)
# display two in a field of width 9, centered, with all blank
# spaces replaced by periods
# Result should be: ...268...
answers[6] = "{3}".format(one, two, three, four)
# display one in a field of width 14, right justified,
     with all blank spaces replaced by zeros
answers[7] = "{3}".format(one, two, three, four)
# set up the next four so that
  (1) the decimal points line up with each other
     (2) 1 decimal place is shown for answers[8]
     (3) 4 decimal places are shown for answers[9]
      (4) 3 decimal places are shown for the final two
# You'll have to play with field widths to line things up.
answers[8] = "\{0\}".format(528.7568)
answers[9] = "\{0\}".format(-32.17)
answers [10] = "\{0\}".format (1.357908642)
answers [11] = "\{0\}".format (16326.4)
# display all the answers
for i in range (12):
   print ("answers[{0}]:\n {1}".format(i,answers[i]))
   print ()
```

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