Quiz 1

To get credit for this quiz, use the Quiz tool at eee.uci.edu to enter your answers, within the Sunday-to-Tuesday quiz period.

You'll notice that some of the questions contain short reminders of what certain Python features mean. We won't always include those, but this week you haven't had much time to learn those meanings.

Problem 1 (7 points)

Each of the following statements claims to be a policy, procedure, good advice, or other characteristic of ICS 31, but each is inaccurate, misguided, or wrongheaded in some way. Please change the statement (as little as necessary) to make it an accurate statement on the same topic.

(a) We expect students in ICS 31 to have at least two years’ experience writing code.

(b) The best and fastest way to get answers to questions about the course material is to send Email to the instructor and TAs.

(c) In pair programming, two programmers split up the work so they can finish twice as fast.

(d) In pair programming, it’s best to find the most experienced partner you can, so your partner can do all the hard parts.

(e) This is college; attending class and lab are optional, so missing them has no bad consequences.

(f) If you find some course concepts difficult or confusing, or if you see people in the lab who work a lot faster than you do, you should give up and take another class.

(g) Save your questions in lecture for the last five minutes of class.
Problem 2 (4 points)

What is the value of each of the Python expressions below? (In other words, what would Python display if you printed each expression out?) Use these variables where appropriate:

\[
\begin{align*}
    r &= 17 \\
    \text{TAX\_RATE} &= 0.1 \\
    s &= \text{'downtown'}
\end{align*}
\]

(a) \( r \times \text{TAX\_RATE} \)

(b) \( \text{len}(s) + 10 \)  # The function \text{len}() returns the number of items in a sequence

(c) \( (r + 5) \times (r - 7) \)

(d) \( s[2] \)  # Remember zero-based indexing

(e) \( s[-1] + s[1] \)  # Negative index numbers count from the end

(f) \( s[0:2] \times 4 \)  # A colon in an index indicates a “slice”

(g) \( s.\text{count}('o') \)  # \text{count}() returns how many times its argument occurs in the object

(h) \( \text{'own'} \text{ in } s \)  # The operator “in” checks inclusion
Problem 3 (3 points)
What is the value of each of the Python expressions below? (In other words, what would Python display if you printed each expression out?) Use this variable where appropriate:

L = [2, 3, 5, 7, 11, 13, 17]

(a) $L[-1]$

(b) $L[0] + L[1] == L[2]$

(c) $L[-1] - L[-2] \leq L[1]$

(d) 15 in L

(e) $L[1:4]$

(f) len(L + [19])

Problem 4 (4 points)
For each of the parts of Problem 2—(a–h)—and Problem 3—(a–f)—say what type the value is. Choose from int, float, bool, str, or list.
Problem 5 (7 points)

What appears in the Python Shell window if you run the following code and the user enters Sam Smith and then 19 at the two points where the code expects input?

```python
print("Hello. What's your name?")
user = input()
print("Hello, ", user, ", how old are you?")
age = int(input())
print("Next year you will be", age + 1, "years old.")
```

Problem 6 (12 points)

All of these topics are addressed on the syllabus and linked pages.

(a) Why is it important to read each assignment specification more than once?

(b) When is the first midterm scheduled (or, if you don’t remember, where can you find out)?

(c) Is it ever okay to e-mail the code you’ve written for an ICS 31 lab assignment to another student?

(d) If you have a question on how your work was scored, whom should you ask first?

(e) What do you do if you haven't finished the whole lab assignment by the end of the day on Friday, when it's due?

(f) If you and your partner are running out of time, is it okay to split up the remaining work (you do some, your partner does the rest) and combine that work to submit it?