

# CPSC 1301, Computer Science I Homework 05

## Chapter 7, *Learning Python*

### Readings

Read chapter 7 in the *Learning Python* book.

### Discussion Questions

Answer the discussion questions in writing.

1. In Python, strings are classified as *immutable sequences*. This means two things. What are they?
2. Can you use both single quotes (') and double quotes (") to delimit a string?
3. Why does Python support both single and double quotes?
4. What is an *escape character*? Give three examples of escape characters.
5. What is a *raw string*? How do you create a raw string? What are they good for?
6. Why would you use a triple quoted string?
7. At the command prompt, what do the following Python expressions evaluate to:

- |                           |                       |
|---------------------------|-----------------------|
| • <code>s = 'spam'</code> | • <code>s[1:]</code>  |
| • <code>s[0]</code>       | • <code>s[2:]</code>  |
| • <code>s[1]</code>       | • <code>s[3:]</code>  |
| • <code>s[2]</code>       | • <code>s[4:]</code>  |
| • <code>s[3]</code>       | • <code>s[:4]</code>  |
| • <code>s[-1]</code>      | • <code>s[:3]</code>  |
| • <code>s[-2]</code>      | • <code>s[:2]</code>  |
| • <code>s[-3]</code>      | • <code>s[:1]</code>  |
| • <code>s[-4]</code>      | • <code>s[:0]</code>  |
| • <code>s[0:]</code>      | • <code>s[0:4]</code> |

8. How do you convert a string to an integer, e.g., convert the string "42" to the integer 42?
9. How do you find the ASCII value of a character?
10. Do string methods generate new objects or do they mutate the current object in place?
11. What is the difference between a method call and a function call?
12. In string format expressions, what goes on the left side of the % operator? What goes on the right side of the % operator?
13. Review the Test Your Knowledge Quiz at the end of the chapter.