

CPSC 1301, Computer Science I Homework 04

Chapter 5 and 6, *Learning Python*

Readings

Read chapters 5 and 6 in the *Learning Python* book.

Discussion Questions

Answer the discussion questions in writing.

1. In Python, how are integers written?
2. In Python, floats consist of digits and some other optional characters. What are the other optional characters?
3. How are *octal* numbers represented in Python? How are *hexadecimal* numbers represented in Python?
4. What is *operator precedence*? What is *operator associativity*?
5. What are the six arithmetic operators in Python, and what is their precedence?
6. What are the three logical operators in Python, and what is their precedence?
7. There are six comparison/equality operators in Python. What are they and what is their precedence?
8. What is a *variable*? When are variables created? What happens to variables when they are used in expressions? What is the *definite assignment rule*? This is not in the book.
9. Evaluate `5 / 3`, `5 // 3`, and `5 % 3`. What do these expressions return? What is the difference between the single slash (/) and the double slash (//)? What does the percent (%) sign do when used as an operator?
10. How do you create a Decimal object? Why would you want to create a Decimal object?
11. What is a Python *set*? How do you create a *set literal*? Name one unique feature of sets.
12. What is a *Boolean*?
13. In Python's *dynamic typing* model, when are types determined? We won't actually get to types in this class, but take a wag at describing what a type is.
14. What is a *reference* in Python? What happens in Python whenever you create a new value, such as `42` or `spam`?
15. What is an *object* in Python? (This is a very important question.)
16. What is a *reference* in Python? What happens in Python whenever you create a new value, such as `42` or `spam`?
17. Be sure to review the Test You Knowledge quizzes at the end of chapters 5 and 6. You may see them again.