Lesson 1.06: Quiz and Debugging

# Learning Objectives

* Define and identify: syntax errors, runtime errors, semantic errors
* Respond to error messages

# Materials/Preparation

* Quiz
* Read through the debugging activity so that you are familiar with the requirements and can assist students

# Pacing Guide

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| Duration | Description |
| 5 Minutes | Pass out Quiz |
| 20 Minutes | Quiz |
| 25 Minutes | Debugging Activity |

# Instructor’s Notes

1. Quiz
2. Debugging
   1. Poll students on which errors were 1, 2, 3 of first section
   2. go over different types of errors:
      1. Syntax Error: Python can only execute a program if the syntax is correct; otherwise, the interpreter displays an error message. Syntax refers to the structure of a program and the rules about that structure. For example, parentheses have to come in matching pairs, so (1 + 2) legal, but 8) is a syntax error.
      2. Semantic Error: The third type of error is the semantic error. If there is a semantic error in your program, it will run successfully in the sense that the computer will not generate any error messages, but it will not do the right thing. It will do something else. Specifically, it will do what you told it to do.
      3. Runtime Error: The second type of error is a runtime error, so called because the error does not appear until after the program has started running. These errors are also called exceptions because they usually indicate that something exceptional (and bad) has happened.
   3. Go over the correct answers
   4. Have Students discuss how they debugged.
      1. Ask Which line should you look at it
      2. Ask What the error message is saying
   5. Discuss some tactics: print statements