Chapter 1

Answers for Exercises 1,3,5,7,9

1. What is the function of the secondary memory in a computer?

C –Store information for the long term, even beyond a power cycle.

3. What is the difference between a compiler and an interpreter?

* Interpreter translates program to machine language one statement at a time; Compiler scans the entire program and translates it as a whole into machine code.
* Interpreter is able to have an interactive conversation; Compiler needs to be handed the entire program in a file and then it runs a process to translate and puts the resulting machine langrage into a file for later execution.
* Interpreter doesn’t generate intermediate object code so it’s memory efficient; Compiler generates intermediate object code which further requires linking, which requires more memory.

5. What is wrong with the following code:

>>> primt ‘Hello world!’ 🡪 print(‘Hello world!’)

7. What will the following program print out:

X=43

X=X+1

print(X)

Answer: 44

9. How do you fix a “Syntax Error?”

* + First, read the line and character that Python indicates in a syntax error.
  + Then, locate the error by hint or narrow down the error into specific lines in the program.
  + Next, think how to fix the error. Look at the information from the error messages or from the output of the program. Or explain the code to others to detect errors.
  + Last, correct all the mistakes and run the program until it works correctly.

# If stuck in the correcting process, undo all the recent changes until I get back to a program that works and that I fully understand. Then start rebuilding.