***Starting Out with Python, 5th Edition***

**Answers to Review Questions**

**Chapter 1**

**Multiple Choice**

1. b

2. a

3. d

4. b

5. c

6. a

7. c

8. b

9. a

10. a

11. d

12. b

13. c

14. b

15. c

16. a

17. b

18. d

19. b

20. b

21 c

22. a

23. d

24. a

25. b

**True or False**

1. False

2. True

3. True

4. False

5. True

6. False

7. True

8. False

9. False

10. False

**Short Answer**

1. Because without it, the computer could not run software.

2. A bit that is turned on represents 1, and a bit that is turned off represents 0.

3. A digital device

4. Keywords

5. Mnemonics

6. A compiler is a program that translates a high-level language program into a separate machine language program. The machine language program can then be executed any time it is needed. An interpreter is a program that both translates and executes the instructions in a high-level language program. As the interpreter reads each individual instruction in the program, it converts it to a machine language instruction and then immediately executes it. Because interpreters combine translation and execution, they typically do not create separate machine language programs.

7. Operating system

**Exercises**

1. *No solution -- This is a hands-on exercise to help you learn how to work with the*

*Python interpreter in interactive mode.*

2. *No solution -- This is a hands-on exercise to help you learn how to work with the*

*IDLE programming environment.*

3. **Decimal Binary**

11 1011

65 1000001

100 1100100

255 11111111

4. **Binary Decimal**

1101 13

1000 8

101011 43

5. Here is an example: The ASCII codes for the name Marty are:

M = 77

a = 97

r = 114

t = 226

y = 121

6.

• Guido van Rossum is the creator of the Python programming language.

• Python was created in the late 1980s.

• Benevolent Dictator for Life