Chapter 1 Review Questions

1. Computers are simply \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ devices.
2. The physical parts of the computer are referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The CPU is considered the \_\_\_\_\_\_\_\_\_\_\_ of the computer.
4. The CPU performs basic \_\_\_\_\_\_\_\_\_\_\_\_ and controls computer \_\_\_\_\_\_\_\_\_.
5. The main memory in a computer is often referred to as \_\_\_\_\_\_\_.
6. Main memory is volatile and is erased when the computer is \_\_\_\_\_\_\_\_\_\_\_\_\_.
7. \_\_\_\_\_\_\_\_\_\_ Storage device memory is non-volatile and is retained when the power is turned off.
8. A computer keyboard, mouse, and camera are examples of \_\_\_\_\_\_\_\_\_ devices.
9. Computer monitors, speakers, and printers are examples of \_\_\_\_\_\_\_\_\_\_devices.
10. Computers follow a 3-step process of \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_.
11. Sets of instructions for the computer are commonly referred to as \_\_\_\_\_\_\_\_\_.
12. \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ are the two basic types of software.
13. The language of computers is a \_\_\_\_\_\_\_\_\_ language.
14. The smallest information representation in computing is a \_\_\_\_\_ or binary digit.
15. A binary digit can have a logical state of \_\_\_\_\_ or \_\_\_\_\_.
16. A Byte is a combination of \_\_\_\_ bits that are either one or zero.
17. The number represented by 0110 1001 is \_\_\_\_\_\_\_.
18. The binary representation of the number 255 is \_\_\_\_\_\_\_\_.
19. The names of the two low-level languages are \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_.
20. A Machine cycle consists of \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_.
21. A 2 GHz (gigahertz) processor can execute \_\_\_\_\_\_\_\_\_\_ instructions per second.
22. High-level languages make programming a computer \_\_\_\_\_ and more \_\_\_\_\_\_\_.
23. Python is a \_\_\_\_\_\_\_ -level language.
24. A (n) \_\_\_\_\_\_\_\_\_\_\_ translates a high-level language into a separate machine language program.
25. A (n) \_\_\_\_\_\_\_\_\_\_\_ reads, translates, and executes a program one line at a time.
26. The characteristics and rules that must be followed when writing programs in a high-level language are \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_.
27. Words that are reserved in a programming language are called \_\_\_\_\_\_\_\_\_\_\_\_.
28. The rules for combining symbols, operators, and punctuation in a programming language are referred to as the languages \_\_\_\_\_\_\_\_\_\_.
29. Plan, design, develop, test, and evaluate are the five steps in the \_\_\_\_\_\_\_\_\_\_\_ development process.
30. A shorthand version of the steps to complete a task in a computer program is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
31. A set of logical steps taken to complete a task is called an \_\_\_\_\_\_\_\_\_\_\_\_\_.
32. The act of discerning in detail from the requirements what the program is to accomplish is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
33. The four steps in the Software Development Life-cycle are \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_.
34. The two types of programming errors are \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ errors.

Chapter 1 Exercises

1. Explain the differences between main memory and secondary storage.
2. List at least three (3) input devices.
3. List at least three (3) output devices.
4. List the two (2) types of software.
5. Write the word Python in binary.
6. Write the binary representation for the number 176.
7. List the two low level languages.
8. List the four steps in a machine cycle.
9. List the four steps in the Software Development Life Cycle
10. Write the pseudocode for the steps required to determine the total price for some number of items priced at $9.00 each with a 7% sales tax.
11. Draw a flow chart of the steps in exercise 2 above.
12. What is the purpose of a source code repository?
13. List the five phases of the Agile Development cycle.
14. Explain the difference between logic and syntax errors.