**1. A \_\_\_\_\_\_\_\_\_\_ error does not prevent the program from running, but causes it to produce incorrect results.**

a. syntax

b. hardware

c. logic

d. fatal

**2. A \_\_\_\_\_\_\_\_\_\_ is a single function that the program must perform in order to satisfy the customer.**

a. task

b. software requirement

c. prerequisite

d. predicate

**3. A(n) \_\_\_\_\_\_\_\_\_\_ is a set of well-defined logical steps that must be taken to perform a task.**

a. logarithm

b. plan of action

c. logic schedule

d. algorithm

**4. An informal language that has no syntax rules and is not meant to be compiled or executed is called \_\_\_\_\_\_\_\_\_\_.**

a. faux code

b. pseudocode

c. Python

d. a flowchart

**5. A \_\_\_\_\_\_\_\_\_\_ is a diagram that graphically depicts the steps that take place in a program.**

a. flowchart

b. step chart

c. code graph

d. program graph

**6. A \_\_\_\_\_\_\_\_\_\_ is a sequence of characters.**

a. char sequence

b. character collection

c. string

d. text block

**7. A \_\_\_\_\_\_\_\_\_\_ is a name that references a value in the computer’s memory.**

a. variable

b. register

c. RAM slot

d. byte

**8. A \_\_\_\_\_\_\_\_\_\_ is any hypothetical person using a program and providing input for it.**

a. designer

b. user

c. guinea pig

d. test subject

**9. A string literal in Python must be enclosed in \_\_\_\_\_\_\_\_\_\_.**

a. parentheses.

b. single-quotes.

c. double-quotes.

d. either single-quotes or double-quotes.

**10. Short notes placed in different parts of a program explaining how those parts of the program work are called \_\_\_\_\_\_\_\_\_\_.**

a. comments

b. reference manuals

c. tutorials

d. external documentation

**11. A(n) \_\_\_\_\_\_\_\_\_\_ makes a variable reference a value in the computer’s memory.**

a. variable declaration

b. assignment statement

c. math expression

d. string literal

**12. This symbol marks the beginning of a comment in Python.**

a. &

b. \*

c. \*\*

d. #

**13. Which of the following statements will cause an error?**

a. x = 17

b. 17 = x

c. x = 99999

d. x = '17'

**14. In the expression 12 + 7, the values on the right and left of the + symbol are called \_\_\_\_\_\_\_\_\_\_.** a. operands b. operators c. arguments d. math expressions

**15. This operator performs integer division.**

a. //

b. %

c. \*\*

d. /

**16. This is an operator that raises a number to a power.**

a. %

b. \*

c. \*\*

d. /

**17. This operator performs division, but instead of returning the quotient it returns the remainder.**

a. %

b. \*

c. \*\*

d. /

**18. Suppose the following statement is in a program: price = 99.0. After this statement executes, the price variable will reference a value of which data type?**

a. int

b. float

c. currency

d. str

**19. Which built-in function can be used to read input that has been typed on the keyboard?**

a. input()

b. get\_input()

c. read\_input()

d. keyboard()

**20. Which built-in function can be used to convert an int value to a float?**

a. int\_to\_float()

b. float()

c. convert()

d. int()

**21. A magic number is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

a. a number that is mathematically undefined

b. an unexplained value that appears in a program’s code

c. a number that cannot be divided by 1

d. a number that causes computers to crash

**22. A \_\_\_\_\_\_\_\_\_\_ is a name that represents a value that does not change during the program’s execution.**

a. named literal

b. named constant

c. variable signature

d. key term

**Algorithm Workbench**

1. Write Python code that prompts the user to enter his or her age and assigns the user’s input to an integer variable named age.

2. Write Python code that prompts the user to enter his or her favorite color and assigns the user’s input to a variable named color.

3. Write assignment statements that perform the following operations with the variables a, b, and c:

a. Adds 2 to a and assigns the result to b

b. Multiplies b times 4 and assigns the result to a

c. Divides a by 3.14 and assigns the result to b

d. Subtracts 8 from b and assigns the result to a

4. Assume the variables result, w, x, y, and z are all integers, and that w = 5, x = 4, y = 8, and z = 2. What value will be stored in result after each of the following statements execute?

a. result = x + y

b. result = z \* 2

c. result = y / x

d. result = y – z

e. result = w // z

5. Write a Python statement that assigns the product of 10 and 15 to the variable product.

6. Write a Python statement that subtracts the variable down\_payment from the variable total and assigns the result to the variable due.

7. Write a Python statement that multiplies the variable subtotal by 0.15 and assigns the result to the variable total.

8. What would the following display?

a = 5

b = 2

c = 3

result = a + b \* c

print(result)

9. What would the following display?

num = 99

num = 5

print(num)

10. Assume the variable sales references a float value. Write a statement that displays the value rounded to two decimal points.

11. Assume the following statement has been executed:

number = 1234567.456

Write a Python statement that displays the value referenced by the number variable formatted as 1,234,567.5

12. What will the following statement display?

print('X\tO\tX\nO\tX\tO\nX\tO\tX\n')

1. Personal Information Write a program that displays the following information:

• Your name

• Your address, with city, state, and ZIP

• Your telephone number

• Your college major