1. Which of the following is the same as the mean?

a. median

b. sum

c. arithmetic average

d. logarithm

2. The process of reversing the positions of two variables is called \_\_\_\_.

a. sorting

b. swapping

c. selecting

d. inserting

3. Which of the following is considered to be a popular coding scheme?

a. ASCII

b. EBCDIC

c. Unicode

d. All of the above

4. An array must have a(n) \_\_\_\_ size.

a. finite

b. infinite

c. random

d. small

5. What is the name of the flag variable in the following code?

sortScores()

pairsToCompare = numberOfEls – 1

switchOccurred = "Yes"

while switchOccurred = "Yes"

x = 0

switchOccurred = "No"

while x <= pairsToCompare

if score[x] > score[x + 1] then

perform switchValues()

switchOccurred = "Yes"

endif

x = x + 1

endwhile

pairsToCompare = pairsToCompare – 1

endwhile

return

a. switchOccurred

b. pairsToCompare

c. numberOfEls

d. x

6. What is the purpose of the flag variable in a bubble sort?

a. to eliminate unnecessary swaps

b. to eliminate unnecessary comparisons

c. to stop as soon as the list is sorted

d. to sort an array of unknown size

7. Which of the following sorting methods is least efficient?

a. insertion

b. selection

c. basic bubble sort

d. optimized bubble sort

8. Why is a bubble sort often presented first when learning sorting

methods?

a. it is the fastest

b. it is the most efficient

c. it is easiest to understand

d. it uses fewer loops than other methods

9. In a(n) \_\_\_\_ sort all of the array elements are moved to make room for the newly sorted element.

a. swap

b. selection

c. bubble

d. insertion

10. In a(n) ascending \_\_\_\_ sort the first element in the array is assumed to be the smallest.

a. bubble

b. swap

c. selection

d. insertion

11. When a large amount of data needs to be sorted, it is more efficient to store the logical order and the physical address in a(n) \_\_\_\_ than

to sort the data.

a. index

b. array

c. memory address

d. linked list

12. What is an example of a batch program?

a. Internet browser

b. airplane reservation system

c. payroll processing system

d. word processing program

13. What is another name for an interactive program?

a. batch program

b. real-time application

c. menu program

d. offline program

14. Menus are used in \_\_\_\_ programs.

a. batch

b. interactive

c. command-line

d. offline

15. A menu without a \_\_\_\_ is very frustrating for a user.

a. quit option

b. save option

c. submenu

d. console

16. Many organizations provide a(n) \_\_\_\_ menu to callers to handle routing of telephone calls.

a. audio

b. graphical user interface

c. batch

d. console

17. Module statements that are “invisible” to the rest of the program are said to be in a(n) \_\_\_\_.

a. function

b. black box

c. orange triangle

d. loop

18. In programming, there is a saying that no program is ever really \_\_\_\_.

a. original

b. elegant

c. well-written

d. completed

19. When a menu contains numerous options, it is more elegant to use

a(n) \_\_\_\_ structure than a series of decisions.

a. case

b. loop

c. if then else

d. batch

20. Programs that make it easy for the user to make desired choices are

termed \_\_\_\_.

a. complete

b. elegant

c. user-friendly

d. windows

21. \_\_\_\_ values can hold both letters and numbers.

a. Numeric

b. Boolean

c. Character

d. Black box

22. When using a case structure to process a menu selection, a program with four menu options will require \_\_\_\_ cases.

a. 1

b. 3

c. 4

d. 5

23. Programs that anticipate user errors employ \_\_\_\_ programming.

a. poor

b. defensive

c. elegant

d. weak

24. A file with ordered records is a \_\_\_\_ file.

a. sorted

b. sequential

c. temporal

d. random

25. Frequently records are stored in order of their \_\_\_\_ field.

a. primary

b. unique

c. key

d. numeric

26. What record will appear first in a merged file created from the two files listed below?

East Coast File

eastName eastBalance

Able 100.00

Brown 50.00

Dougherty 25.00

Hanson 300.00

Ingram 400.00

Johnson 30.00

West Coast File

westName westBalance

Chen 200.00

Edgar 125.00

Fell 75.00

Grand 100.00

a. Able 100.00

b. Chen 200.00

c. Grand 100.00

d. Johnson 30.00

27. What type of variable controls the main loop of a file merging program?

a. temporary

b. file

c. flag

d. character

28. When merging, a \_\_\_\_ is used to determine which file the next record comes from.

a. comparison

b. loop

c. sequence

d. flag

29. What action does a merging program take after it writes a record from file 2?

a. writes the next entry from file 1

b. writes the next entry from file 2

c. reads the next entry from file 2

d. reads the next entry from file 1

30. When merging two files, an eof condition is detected in one file. In order to continue processing a \_\_\_\_ value is set in the comparison

variable.

a. dumb

b. high

c. null

d. flag

31. Which of the following would be the best character high value?

a. AAAAAAAA

b. ABC

c. X

d. ZZZZZZZZZZ

32. Why might it be a good idea to create a copy of the master file before updating it?

a. more efficient

b. creating a copy eliminates duplicate values

c. takes less time

d. in case there are questions regarding the update process

33. When a child file is updated, it becomes a parent, and its parent becomes a \_\_\_\_.

a. merged file

b. transaction file

c. grandparent

d. master

34. When writing a program to match master and transaction methods, what should happen when the value of the master key is greater

than the transaction key?

a. an error has occurred and should be logged

b. there are no changes to the master

c. the master should be updated

d. the transaction should be updated

35. When updating a master file with data from a transaction file, what should happen for an addition record when a match is found in the

master file?

a. an update should be made

b. an error message should be printed

c. the master record should be removed

d. a new record should be added

36. What happens during a merging program when both input files contain the same value?

a. an error occurs

b. the program exits

c. two identical records will appear in the merged file

d. only one record will appear in the merged file

37. One of the benefits of \_\_\_\_ is that each module needs to use only the variable names declared within it, so multiple programmers can

create the individual modules without knowing the data names used

by the other modules.

a. encapsulation

b. abstraction

c. modularization

d. cohesion

38. In most modern programming languages such as Java and C++, parameters in the header are separated by the \_\_\_\_ character.

a. . (period)

b. , (comma)

c. \* (asterisk)

d. # (pound)

39. The \_\_\_\_ statement passes a value back to the calling module.

a. return

b. exit

c. pass

d. value

40. You should examine the \_\_\_\_ of a programming language to see what functions it provides.

a. methods

b. documentation

c. Web site

d. compiler

41. A device that you can use without understanding the internal workings is a \_\_\_\_.

a. subroutine

b. black box

c. blue triangle

d. computer

42. You need to understand a subroutine’s \_\_\_\_ in order to use it.

a. internal structure

b. local variables

c. programming style

d. interface

43. The variable’s \_\_\_\_ in no way affects how the method is called from another module.

a. local name

b. data type

c. size

d. definition

44. When designing modules to use within larger programs, some programmers find it helpful to use a(n) \_\_\_\_ chart, a tool that

identifies and categorizes each item needed within the module as pertaining to input, processing, or output.

a. printer

b. IPO

c. Slad

d. I/O

45. To beginning programmers, using only \_\_\_\_ variables seems like a far simpler option than declaring local variables and being required

to pass them from one module to another.

a. global

b. shared

c. undeclared

d. constant

46. Passing values to a module helps facilitate \_\_\_\_.

a. confusion

b. encapsulation

c. sharing

d. black boxes

47. \_\_\_\_ is a feature of programs or modules that have been tested and proven to work correctly.

a. Reusability

b. Expense

c. Reliability

d. Efficiency

48. \_\_\_\_ cohesion occurs in modules that perform tasks that share data.

a. Procedural

b. Functional

c. Communicational

d. Sequential

49. A module that performs tasks based on a decision statement has

\_\_\_\_ cohesion.

a. procedural

b. temporal

c. logical

d. functional

50. A housekeeping routine exhibits \_\_\_\_ cohesion.

a. functional

b. temporal

c. procedural

d. logical