

Final Exam: Java Programming Language

Name: _____ Date: June 16, 2022

I declare that I have worked independently on this exam, that the work being submitted is my own, and that I have not discussed the questions with other students nor given other students answers to the questions. I understand that I am allowed to discuss course material (notes, readings, group projects, etc.) with other students, but not specifically these questions.

Signature: _____

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- ___d___ 1. The body of a class must be enclosed in _____.
a. asterisks c. forward slashes
b. braces d. parentheses
- ___ 2. The System class extends methods from its superclass, the ____ class.
a. Array c. Object
b. Exception d. JavaBean
- ___ 3. A string of characters in quotation marks is called a string _____.
a. array c. quote
b. literal d. object
- ___ 4. A missing semicolon at the end of a Java statement is an example of a ____ error.
a. logic c. syntax
b. semantic d. semantic
- ___ 5. A ____ error is an error that changes the meaning of the code.
a. logic c. syntax
b. semantic d. system
- ___ 6. The ____ is a wildcard symbol to tell a program to import all necessary classes from a package.
a. asterisk c. period
b. comma d. semicolon
- ___ 7. When a method refers to an instance of an object with a variable, the variable is called a(n) _____.
a. data variable c. object variable
b. instance variable d. reference variable
- ___ 8. Which of the following methods is called by a reference variable?
a. drawImage() c. getImage()
b. getDocumentBase() d. setBackground()
- ___ 9. Which of the following is NOT an advantage of using Applet Viewer rather than a browser?
a. Applet Viewer ignores irrelevant HTML code
b. Applet Viewer does not have to be Java-enabled
c. Applet Viewer uses less memory than a browser
d. Applet Viewer catches incorrect references to an applet
- ___ 10. Which of the following is not a reference type in Java?
a. array c. float
b. BufferedReader d. String

11. The _____ class decodes bytes into characters.
 - a. BufferedInputStream
 - b. BufferedReader
 - c. InputStreamReader
 - d. System.in
12. Which of the following is an equality operator?
 - a. !=
 - b. =
 - c. >=
 - d. <=
13. In the order of operator precedence for numeric expressions, _____ operations are performed first.
 - a. addition and/or subtraction
 - b. integer division
 - c. modular division
 - d. multiplication and/or division
14. _____ is a class used to display standard dialog boxes.
 - a. Box
 - b. JFrame
 - c. JOptionPane
 - d. JWindow
15. The System class provides a(n) _____ method to terminate an application with a GUI.
 - a. abort()
 - b. exit()
 - c. quit()
 - d. terminate()
16. Pressing _____ when a window is active saves an image of the current screen to the Windows Clipboard.
 - a. ALT+CTRL
 - b. ALT+INSERT
 - c. ALT+PRINT SCREEN
 - d. ALT+SHIFT
17. A listener interface becomes _____ with its event source at compile time.
 - a. buffered
 - b. defined
 - c. instantiated
 - d. registered
18. _____ is a characteristic of a program in which a larger program's source code is broken down into modules.
 - a. Encapsulation
 - b. Looping
 - c. Modularity
 - d. Repetition
19. The _____ statement identifies a block of statements that potentially may throw an exception.
 - a. catch
 - b. finally
 - c. throw
 - d. try
20. Which of the following is the logical NOT operator?
 - a. !
 - b. !=
 - c. ||
 - d. &&

True/False

Indicate whether the sentence or statement is true or false.

- _____ 21. Java programmers conventionally use underlines to distinguish words in class names.
- _____ 22. During compilation, the compiler adds a new file to the disk containing bytecode and ending with a .java extension.
- _____ 23. Applets can run only within a browser or viewer.
- _____ 24. An applet uses the println() method to display text.
- _____ 25. Java applet images must be GIF files.
- _____ 26. The logic of assigning a value to a variable in Java works from left to right.
- _____ 27. Java will allow the programmer to store a double in a float location, but there may be loss of precision.
- _____ 28. Expressions cannot contain methods.
- _____ 29. Comparing different data types in a conditional expression will result in an error.

- ___ 30. The `System.out.println()` method cannot concatenate different data types into an argument.
- ___ 31. Swing components are implemented with native code.
- ___ 32. Java provides specific rules about coding conventions.
- ___ 33. When a method is complete, execution always passes back to the next sequential line that follows the call.
- ___ 34. The expression, `!(a == a)`, evaluates to true.
- ___ 35. A method may not be called twice in the same program.
- ___ 36. The values or operands used in a logical expression must be boolean.
- ___ 37. Both operands of a logical expression must be evaluated before the expression can produce a result.
- ___ 38. The default case in a switch statement is required.
- ___ 39. The `DecimalFormat` class does not include support for scientific notation.
- ___ 40. The switch statement can only accept an integer value as an argument.

Completion

Complete each sentence or statement.

- 41. The `Date` class is part of the _____ package.
- 42. _____ refers to the amount of storage allocated to hold the fractional part of a number.
- 43. A(n) _____ language enforces a set of rules about how you use the objects you create, especially when using different types of data.
- 44. The _____ operation forces the conversion of one primitive data type to another.
- 45. A listener interface has methods called _____ that specify what will happen when an event is sent to the listener interface.
- 46. When sending multiple arguments in a method call, the arguments are separated by one or more _____.
- 47. The expression, `(3 > 7) || (1 > 0)`, evaluates to the value of _____.
- 48. Before a catch statement is executed, a program should perform a(n) _____ check, which involves testing data to ensure it uses the correct data type.
- 49. The process of repeating (iterating) a certain section of code is referred to as _____.
- 50. A(n) _____ is used to group together several `Checkbox` components.