Exam

Name_____

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

1) All information is stored in the computer using binary numbers.   1) _____

2) Java is an object-oriented programming language.   2) _____

3) System.out.print is used in a program to denote that a comment follows.   3) _____

4) Java byte codes are directly executable whereas Java source code is not.   4) _____

5) The Java compiler is able to find all programmer errors.   5) _____

6) Java is a case-sensitive language meaning that Current, current, and CURRENT will all reference   6) _____
   the same identifier.

7) Code placed inside of comments will not be compiled and therefore will not execute. 7) _____

8) The word "Public" is a reserved word.   8) _____

9) Reserved words in Java can be redefined by the programmer to mean something other than their   9) _____
   original intentions.

10) In a Java program, dividing by 0 is a syntax error.   10) _____

11) Binary numbers are composed entirely of 0s and 1s.   11) _____

12) RAM is random access memory while ROM is not random access memory.   12) _____

13) Java is an example of a fourth generation language.   13) _____

14) The line of Java code "// System.out.println("Hello");" will cause "Hello" to be output.   14) _____

15) A unique aspect of Java that allows code compiled on one machine to be executed on a machine of   15) _____
    a different hardware platform is Java's bytecodes.

16) A Java compiler can determine if you have followed both proper syntax and semantics.   16) _____

17) A black and white picture can be stored by representing each pixel using a single bit.   17) _____

18) Mistyping "println" as "printn" will result in a run–time error.

18) _____

19) One terabyte is equivalent to approximately 1000 gigabytes.

19) _____

20) An operating system is considered software.

20) _____

21) Modern computers store information in analog.

21) _____

22) Data written to a memory location overwrites and destroys any information that was stored at that location.

22) _____

23) If x is a string, then x = new String("OH"); and x = "OH"; will accomplish the same thing.

23) _____

24) Only difficult programming problems require a pseudocode solution before the programmer creates the implementation (program) itself.

24) _____

25) In Java, if and if–else are selection statements.

25) _____

26) In Java, the symbol "=" and the symbol "==" are used synonymously (interchangeably).

26) _____

27) When comparing any primitive type of variable, == should always be used to test to see if two values are equal.

27) _____

28) The statements x++; and ++x; will accomplish the same thing.

28) _____

29) The statement { } is a legal block.

29) _____

30) The statement if (a >= b) a++; else b––; will do the same thing as the statement if (a < b) b––; else a++;.

30) _____

31) An if statement may or may not have an else clause, but an else clause must be part of an if statement.

31) _____

32) In order to compare int and double variables, you can use <, >, ==, !=, <=, >=, but to compare char and String variables, you must use compareTo( ), equals( ) and equalsIgnoreCase( ).

32) _____

33) The following for–loop is an infinite loop.
    for(int j = 0; j < 1000;) i++;

33) _____

34) The following loop is syntactically valid.
    for(int j = 0; j < 1000; j++) j––;

34) _____

For question(s) below, assume that boolean done = false, int x = 10, int y = 11, String s = "Help" and String t = "Goodbye".

35) The expression (!done && x <= y) is true.   35) _____

36) The expression (done | | s.compareTo(t) < 0) is true.   36) _____

37) In Java, it is possible to create an infinite loop out of while loops, but not for–loops.   37) _____

38) The programmer creates pseudocode during the implementation phase of program development.   38) _____

39) Software design is the first step in program development.   39) _____

40) The relational operators < and > can be used to tell whether one string comes before another   40) _____
    alphabetically.

41) The expression 'Z' < 'a' is true.   41) _____

42) The expression a | | b will be true if either a or b is true, but not if both are true.   42) _____

43) The statement num –= num; will have the same result as the statement num = 0.   43) _____

44) If the integer variable answer is 5, then after answer %= 8; is executed, answer will be 3.   44) _____

45) Any for loop can be written as a while loop.   45) _____

46) The third portion of a for loop, the increment portion, must increment or decrement a variable by   46) _____
    1.

47) When reading an unknown amount of input from the user, a for loop would be the best choice.   47) _____

48) If x is the String "Hi There", then x.toUpperCase().toLowerCase(); will return the original version   48) _____
    of x.

49) If String name = "George W. Bush"; then the instruction name.length(); will return 14.   49) _____

50) If String a = "ABCD" and String b = "abcd" then a.equals(b); returns false but   50) _____
    a.equalsIgnoreCase(b); returns true.

51) Unlike the String class where you must pass a message to an object (instance) of the class, as in   51) _____
    x.length( ), in order to use the Math class, you pass messages directly to the class name, as in
    Math.abs( ).

3

52) A double is wider than an int.   52) _____

53) A variable of type boolean will store either a 0 or a 1.   53) _____

54) In Java, 'a' and 'A' are considered to be different values.   54) _____

55) You cannot cast a String to be a char and you cannot cast a String which stores a number to be an   55) _____
    int or double.

56) If a, b and c are int variables with a = 5, b = 7, c = 12, then the statement int z = (a * b – c) / a; will   56) _____
    result in z equal to 4.

57) The mod operator, %, can only be performed on int values and its result is a double.   57) _____

58) The word println is a reserved word.   58) _____

59) A Java variable is the name of a data value stored in memory that can not change during the   59) _____
    program's execution.

60) If you want to use classes from a package other than java.lang, you must import them.   60) _____

61) The operators * and + have the same precedence.   61) _____

62) Since double to int is a narrowing conversion, there is no way to convert a double to an int.   62) _____

1) TRUE

2) TRUE

3) FALSE

4) FALSE

5) FALSE

6) FALSE

7) TRUE

8) FALSE

9) FALSE

10) FALSE

11) TRUE

12) FALSE

13) FALSE

14) FALSE

15) TRUE

16) FALSE

17) TRUE

18) FALSE

19) TRUE

20) TRUE

21) FALSE

22) TRUE

23) TRUE

24) FALSE

25) TRUE

26) FALSE

27) FALSE

28) TRUE

29) TRUE

30) TRUE

31) TRUE

32) FALSE

33) TRUE

34) TRUE

35) TRUE

36) FALSE

37) FALSE

38) FALSE

39) FALSE

40) FALSE

41) TRUE

42) FALSE

43) TRUE

44) FALSE

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48) FALSE

49) TRUE

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53) FALSE

54) TRUE

55) TRUE

56) TRUE

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58) FALSE

59) FALSE

60) TRUE

61) FALSE

62) FALSE