Test Review:

1. The programming process consists of several steps, which include:

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| |  | | --- | | Design, Creation, Testing, and Debugging | |

2. The \_\_\_\_\_\_\_\_ decodes an instruction and generates electrical signals.

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| |  | | --- | | Control Unit | |

3. In memory, C++ automatically places a \_\_\_\_\_\_\_\_\_\_\_ at the end of string literals.

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| |  | | --- | | Null terminator | |

4. Which character signifies the beginning of an escape sequence?

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What is assigned to the variable a given the statement below with the following  assumptions: x = 10, y = 7, and z, a, and b are all int variables. a = x >= y;   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 1  6. If you place a semicolon after the statement if (x < y)   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | The compiler will interpret the semicolon as a null statement. |   7. What will following segment of code output? int x = 5; if (x = 2) cout << "This is true!" << endl; else cout << "This is false!" << endl; cout << "This is all folks!" << endl;   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | Answer: This is true! This is all folks! |   7. What will the following segment of code output? You can assume the user enters a  grade of 90 from the keyboard. cout << "Enter a test score: "; cin >> test\_score; if (test\_score < 60); cout << "You failed the test!" << endl; if (test\_score > 60) cout << "You passed the test!" << endl; else cout << "You need to study for the next test!";   * Answer:  |  |  | | --- | --- | | |  | | --- | | You failed the test! You passed the test! | |   8. What is the output of the following code segment? n = 1; while (n <= 5) cout << n << ' '; n++;   * Answer:  |  |  | | --- | --- | | |  | | --- | | 1 1 1... and on forever | |   9. This operator increments the value of its operand, then uses the value in context.   * Answer:  |  |  |  | | --- | --- | --- | | |  | | --- | | prefix increment | |  | |   10. This statement may be used to stop a loop's current iteration and begin the next one.   * Answer:  |  |  |  | | --- | --- | --- | | |  | | --- | | continue | |  | |   11. Look at the following statement. while (x++ < 10) Which operator is used first?   * Answer:  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | <  12. During which stage does the central processing unit retrieve from main memory the next instruction in the sequence of program instructions?   * Answer:  |  |  | | --- | --- | | |  | | --- | | fetch | |   13. This step will uncover any syntax errors in your program.   * Answer:  |  |  | | --- | --- | | |  | | --- | | Compiling | |   14. Which escape sequence causes the cursor to move to the beginning of the current line?   * Answer:  |  |  | | --- | --- | | |  | | --- | | \r | |   15. This manipulator causes the field to be left-justified with padding spaces printed to the right.   * Answer:  |  |  | | --- | --- | | |  | | --- | | left | |   16. To use the rand() function, you must #include this header file in your program.   * Answer:  |  |  | | --- | --- | | |  | | --- | | cstdlib | |   17. A file \_\_\_\_\_\_\_\_\_ is a small holding section of memory that file-bound information is first written to.   * Answer:  |  |  | | --- | --- | | |  | | --- | | buffer | |   18. What is the output of the following segment of code if 4 is input by the user when asked to  enter a number? int num; int total = 0; cout << "Enter a number from 1 to 10: "; cin >> num; switch (num) { case 1: case 2: total = 5; case 3: total = 10; case 4: total = total + 3; case 8: total = total + 6; default: total = total + 4; } cout << total << endl;   * Answer:  |  |  | | --- | --- | | |  | | --- | | 13 | |   19. This operator takes an operand and reverses its truth or falsehood.   * Answer:  |  |  | | --- | --- | | |  | | --- | | ! | |   20. Assuming x is 5, y is 6, and z is 8, which of the following is false? x == 5;  7 <= (x + 2);  z < = 4;  (1 + x) != y;  z >= 8;  x >= 0;  x <= (y \* 2)   * Answer:  |  |  | | --- | --- | | |  | | --- | | 3 and 4 are False | |   21. Input values should always be checked for   * Answer:  |  |  | | --- | --- | | |  | | --- | | All of these | |   22. Without this statement appearing in a switch construct, the program "falls through" all of the statements below the one with the matching case expression.   * Answer:  |  |  | | --- | --- | | |  | | --- | | break | |   23. This statement may be used to stop a loop's current iteration and begin the next one.   * Answer:  |  |  | | --- | --- | | |  | | --- | | continue | |   24. Something within a while loop must eventually cause the condition to become false, or a(n) \_\_\_\_\_\_\_\_\_\_ results.   * Answer:  |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  | | --- | | infinite loop | | 25. A(n) \_\_\_\_\_\_\_\_\_ is information that is passed to a function, and a(n) \_\_\_\_\_\_\_\_\_ is information that is received by a function.  Answer:   |  |  | | --- | --- | | |  | | --- | | argument, parameter | | | | | |   26. Which of the following statements about global variables is true?   |  |  | | --- | --- | | |  | | --- | | A global variable can have the same name as a variable that is declared locally  wi) in a function. | |   27. Which of the following is a valid C++ array definition?   |  |  | | --- | --- | | |  | | --- | | int scores [10]; | |  * 28. When writing functions that accept multi-dimensional arrays as arguments, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ must be explicitly stated in the parameter list.  |  |  | | --- | --- | | |  | | --- | | all but the first dimension | |  * 29. Using a linear search to find a value that is stored in the last element of an array of 20,000 elements, \_\_\_\_\_\_\_\_\_\_\_\_ element(s) must be compared.  |  |  | | --- | --- | | |  | | --- | | 20,000 | |  * 30. Data that is sorted in ascending order is ordered  |  |  | | --- | --- | | |  | | --- | | from lowest to highest value | |  * 31. When you work with a dereferenced pointer, you are actually working with:  |  |  | | --- | --- | | |  | | --- | | the actual value of the variable whose address is stored in the pointer variable | |  * 32. A pointer may be initialized with  |  |  | | --- | --- | | |  | | --- | | the address of an existing object | |  * 33. When the less than ( < ) operator is used between two pointer variables, the expression is testing whether  |  |  | | --- | --- | | |  | | --- | | the address of the first variable comes before the address of the second variable in  the computer's memory | |  * 34. To test whether a character is a numeric digit character, use this function.  |  |  | | --- | --- | | |  | | --- | | isdigit | |  * 35. The strcpy function's arguments are:  |  |  | | --- | --- | | |  | | --- | | two addresses | | | | | | |  |  | | --- | |  | |  | |