

# CS1411 - Summer 05 - Test 2 - Part I

June 17, 2005

1. The \_\_\_\_ of the control variable in counter-controlled repetition does not affect how many times the loop's body is executed.
  - a) *name*
  - b) initial value
  - c) increment (or decrement)
  - d) final value
  - e) None of the above.
  
2. The expression after the first semicolon in a for statement typically specifies the .
  - a) initial value of the counter variable
  - b) *final value of the counter variable*
  - c) increment (or decrement)
  - d) All of the above
  - e) Both b and d
  
3. Which of the following for headers varies the control variable over the sequence of values, 12 14 16 18 20?
  - a) *for ( int i = 12; i <= 20; i += 2 )*
  - b) for ( int i = 20; i >= 12; i += 2 )
  - c) for ( int i = 12; i <= 20; i -= 2 )
  - d) for ( int i = 20; i >= 12; i -= 2 )
  - e) for ( int i = 20; i <= 12; i -= 2 )
  
4. When a break statement is encountered in a switch statement, .
  - a) execution proceeds to the next matching case label
  - b) execution proceeds to the default case
  - c) *execution proceeds to the next statement after the switch statement*
  - d) execution returns to the beginning of the switch statement
  - e) execution continues at the next statement
  
5. If a switch statement does not specify a default case, then .
  - a) a syntax error occurs
  - b) a run-time error occurs
  - c) the last case label is treated as the default case
  - d) the first case label is treated as the default case
  - e) *None of the above.*

6. A switch statement's controlling expression can be of type \_\_\_\_ .
- a) *int*
  - b) float
  - c) double
  - d) Both a and b.
  - e) Both b and c.
7. Which of the following is a valid case label?
- a) Case 'a' :
  - b) *case 'H' :*
  - c) Case '4' {
  - d) case '\*' {
  - e) None of the above.
8. A parameter list containing multiple declarations .
- a) is a syntax error
  - b) is a logic error
  - c) must specify at least one primitive type
  - d) separate each declaration using a semicolon
  - e) *must separate each declaration using a comma*
9. A function that returns no information .
- a) will cause a syntax error when compiled
  - b) must end with a return void statement
  - c) *must specify a void return type*
  - d) contains an empty parameter list
  - e) Both c and d.
10. Which of the following function prototypes does not contain a syntax error?
- a) determineMaximum( double one, double two );
  - b) *double determineMaximum( double one, double two );*
  - c) double determineMaximum( one, two );
  - d) determineMaximum( one, two );
  - e) All of the above.
11. Which of the following function headers accepts two ints and returns a value of type double?.
- a) int int returnDouble( double value )
  - b) double returnDouble( int value )
  - c) returnDouble( int value1, int value2 )
  - d) double returnDouble( double value1, double value2 )
  - e) *double returnDouble( int value1, int value2 )*
12. The function header and function call must agree with regard to the \_\_\_\_ of parameters.
- a) number
  - b) type
  - c) order
  - d) *All of the above.*
  - e) Both b and c.

13. A global variable can be hidden in a scope by defining \_\_\_\_ in that scope.

- a) another global variable
- b) a local variable of the same type
- c) *a local variable with the same name*
- d) any local variable
- e) any variable

14. The scope of a global variable begins at \_\_\_\_ and ends at the \_\_\_\_ .

- a) its definition, end of main
- b) its definition, beginning of any function
- c) the beginning of main, end of main
- d) the beginning of main, end of the file in which it is defined
- e) *its definition, end of the file in which it is defined*

15. A local variable becomes inaccessible and its value is permanently lost \_\_\_\_ .

- a) at the end of the file
- b) after it is redefined
- c) once it is hidden by another variable
- d) *after the block in which it was defined expires*
- e) None of the above.

16. If a function \_\_\_\_ , then it is not necessary to declare that function with a function prototype.

- a) is called only by main
- b) is called only once
- c) receives no parameters and does not return any value
- d) *is defined before any statements that call it*
- e) is never called by main

17. enum data types

- a) can not be read directly from the user
- b) can not be printed directly to screen
- c) are internally represented as integers
- d) are used to make code easier to read
- e) *all of the above*

18. The statement `srand( time( 0 ) )` seeds the rand function so that it will generate .

- a) values starting at 0
- b) numbers with 0 digits of precision
- c) the same sequence of numbers every time the application is run
- d) *a different sequence of numbers every time the application is run*
- e) None of the above.

19. The expression \_\_\_\_ returns an integer in the range 12 to 55.

- a) `11 + rand() % 44`
- b) `12 + rand() % 55`
- c) *`12 + rand() % 44`*
- d) `11 + rand() % 43`
- e) `11 + rand() % 55`

20. \_\_\_\_ refers to element 10 in the array units.

- a) units( 10 )
- b) *units[ 10 ]*
- c) units{ 10 }
- d) units" 10 "
- e) units' 10 '

21. After the array declaration `int numbers[ 6 ]`, accessing the value of `numbers[ 6 ]` .

- a) returns the fifth element of numbers
- b) returns the sixth element of numbers
- c) returns the last element of numbers
- d) is a syntax error
- e) *is a logic error*

22. The statement \_\_\_\_ contains a valid declaration and initialization.

- a) `int value[ 3 ] = [ 4, 2, 6, 9 ];`
- b) `int value[ 3 ] = { 4, 2, 6, 9 };`
- c) *`int value[ 3 ] = { 4, 2, 6 };`*
- d) `int value[ 3 ] = ( 4, 2, 6 );`
- e) `int value[ 3 ] = [ 4, 2, 6 ];`

23. \_\_\_\_ is a prototype for a function that takes as an argument an integer array called `arrayName` of length 10 and returns a `bool`.

- a) *`bool test( int [] );`*
- b) `bool test( int [] arrayName );`
- c) `bool test( int [ 10 ] arrayName );`
- d) Both a and b.
- e) Both b and c.

24. Because an array is passed by reference to a function, the callee .

- a) is given a copy of the array
- b) arrays cannot be passed-by-reference
- c) *can modify the original array*
- d) can change the size of the array
- e) can access only the first element of the array

25. When a parameter is passed by value

- a) *the value of the argument is copied into the parameter variable before the function executes*
- b) the value of the parameter variable is copied to the argument on the functions return
- c) the value of the argument is copied into the parameter variable before the function executes and back on the functions return
- d) both the argument and the parameter variable use the same memory
- e) the parameter variable may not be modified inside the function