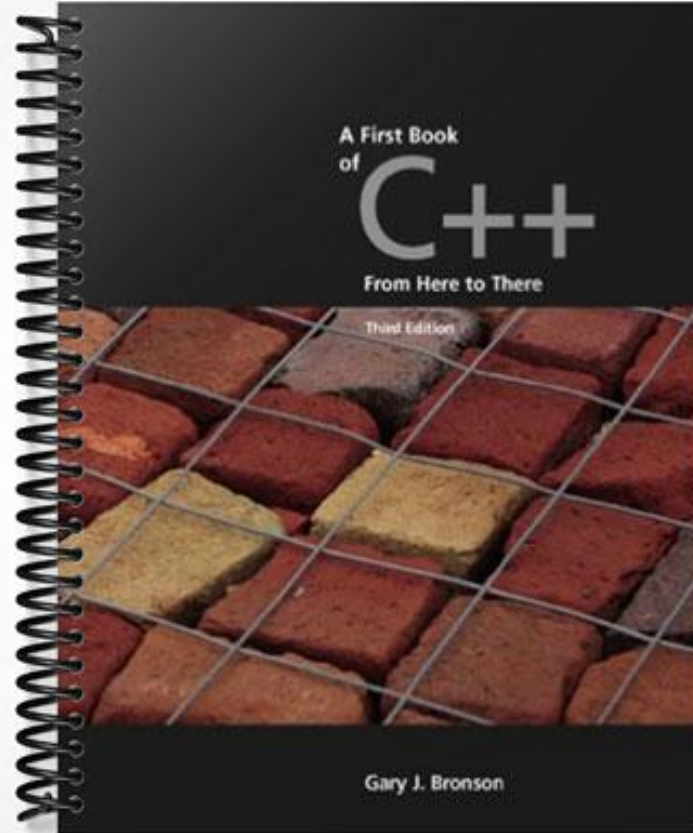


TEST BANK



Ch02

True/False

Indicate whether the statement is true or false.

- ___ 1. To prevent the programmer from attempting to perform an inappropriate operation, C++ allows only certain operations to be performed on certain types of data.
- ___ 2. The term *literal* reflects the fact that such a value explicitly identifies itself.
- ___ 3. Limitations of small and extremely expensive memory are a major concern for the vast majority of programs.
- ___ 4. The *char* data type is used to store multiple characters.
- ___ 5. When the *escape* character is placed directly in front of a select group of characters, it tells the compiler to escape from the way these characters would normally be interpreted.
- ___ 6. `\n` is a character literal, while `"\n"` is a string literal.
- ___ 7. Both the *char* and *bool* data types are signed data types.
- ___ 8. Special symbols such as the dollar sign and the comma are permitted in real numbers.
- ___ 9. Floating-point numbers can not be written in exponential notation.
- ___ 10. Although it is usually better not to mix integers and real numbers when performing arithmetic operations, predictable results are obtained when different data types are used in the same arithmetic expression.
- ___ 11. When evaluating simple arithmetic expressions, we determine the data type of the result by applying the following rules:
 - If both operands are integers, the result is an integer.
 - If any operand is a floating-point value, the result is a floating-point value.
- ___ 12. Two binary arithmetic operator symbols may be placed side by side.
- ___ 13. The precedence of an operator establishes its priority relative to all other operators.
- ___ 14. Character data can not be displayed using *cout*.
- ___ 15. A field width manipulator applies to the insertion of all data following it and remains in effect until it is changed.
- ___ 16. In current programming usage the term *flag* refers to an item, such as a variable or argument, that sets a condition usually considered as either active or nonactive.
- ___ 17. The display of integer values in one of the three possible number systems (decimal, octal, and hexadecimal) changes the manner in which the number is stored inside a computer.

- ___ 18. Individual memory locations in the memory unit do not always have unique addresses.
- ___ 19. Assignment statements always have an equals (=) sign and one variable name immediately to the left of this sign.
- ___ 20. Variables that hold single-precision values are declared using the keyword *float*, whereas variables that hold double-precision values are declared using the keywords *double float*.
- ___ 21. Variables that have the same data type can always be grouped together and declared by using a single declaration statement.
- ___ 22. Once a variable has been declared, it may be given additional names by using a *reference declaration*.
- ___ 23. Current C++ compilers can allocate sufficient storage for a variable without knowing the variable's data type.
- ___ 24. The compiler sometimes generates an error message for undeclared variables.
- ___ 25. C++ does not allow mixed-mode expressions.

Multiple Choice

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

- ___ 26. A data ___ is defined as a set of values and a set of operations that can be applied to these values.
- | | |
|---------|---------------|
| a. type | c. base |
| b. set | d. dictionary |
- ___ 27. C++ provides ___ built-in integer data types.
- | | |
|------|------|
| a. 1 | c. 6 |
| b. 3 | d. 9 |
- ___ 28. The set of values supported by the *int* data type are ___ numbers.
- | | |
|-------------|------------|
| a. positive | c. real |
| b. whole | d. rounded |
- ___ 29. A character code is contained within ___ byte(s).
- | | |
|------|------|
| a. 1 | c. 4 |
| b. 2 | d. 8 |
- ___ 30. The backslash, \, is referred to as the ___ character.
- | | |
|-------------|--------------|
| a. tab | c. escape |
| b. quotient | d. separator |
- ___ 31. In C++, the *bool* data type is used to represent ___ data.
- | | |
|------------|--------------|
| a. complex | c. imaginary |
| b. real | d. logical |
- ___ 32. The ANSI C++ standard requires that an *int* must provide ___ as much storage as a *short int*.
- | | |
|-------------|----------------|
| a. at least | c. three times |
| b. twice | d. four times |

- ___ 33. A *float* value is sometimes referred to as a ___ number.
- a. single-precision
 - b. double-precision
 - c. binary
 - d. decimal
- ___ 34. The *sizeof()* operator can ___ be used to determine the amount of storage reserved by the compiler for a data type.
- a. sometimes
 - b. usually
 - c. always
 - d. never
- ___ 35. The value of 1.625e3 is ___.
- a. .001625
 - b. 162.500
 - c. 1625
 - d. 1625000
- ___ 36. The arithmetic operator % is the C++ symbol for the ___ operation.
- a. addition
 - b. percentage
 - c. modulus
 - d. division
- ___ 37. Dividing the integer 15 by the integer 2 yields the result ___.
- a. 7
 - b. 7.5
 - c. 7.500
 - d. 152
- ___ 38. When parentheses are used within parentheses, the expressions in the innermost parentheses are always evaluated ___.
- a. from left to right
 - b. from right to left
 - c. first
 - d. last
- ___ 39. The C++ statement 'cout << (6 + 15);' yields the result ___.
- a. (6 + 15)
 - b. 21
 - c. error
 - d. (21)
- ___ 40. The keyword *endl* is an example of a C++ ___.
- a. literal
 - b. character
 - c. object
 - d. manipulator
- ___ 41. The *setw(3)* field width manipulator included in the stream of data passed to *cout* sets the field width for the ___ number(s) in the stream.
- a. next
 - b. next two
 - c. next three
 - d. remaining
- ___ 42. To force the *cout* object to align output numbers on the units digit requires a field width wide enough for ___.
- a. the smallest decimal number
 - b. the largest number
 - c. the largest exponent
 - d. the largest displayed number
- ___ 43. When a manipulator requiring an argument is used, the ___ header file must be included as part of the program.
- a. *iostream*
 - b. *cstdlib*
 - c. *omanip*
 - d. *cctype*
- ___ 44. Another name for a manipulator method that uses arguments is a(n) ___.
- a. modifier
 - b. extension
 - c. parameterized manipulator
 - d. variable

- ___ 45. Hexadecimal numbers are denoted using a leading ____.
- a. 0
 - b. 0x
 - c. x
 - d. xx
- ___ 46. In high-level languages like C++, ____ are used in place of actual memory addresses.
- a. aliases
 - b. references
 - c. virtual addresses
 - d. symbolic names
- ___ 47. A variable name must begin with ____.
- a. a letter or an underscore
 - b. a letter or a number
 - c. an upper case letter
 - d. a lower case letter
- ___ 48. Naming a variable and specifying the ____ that can be stored in it are accomplished by using declaration statements.
- a. data type
 - b. value
 - c. precision
 - d. range
- ___ 49. When a declaration statement is used to store a value in a variable, the variable is said to be ____.
- a. created
 - b. declared
 - c. initialized
 - d. referenced
- ___ 50. Multiple references may be declared in a single statement as long as each reference name is preceded by the ____ symbol.
- a. backslash
 - b. forward slash
 - c. modulus
 - d. ampersand

Ch02 Answer Section

TRUE/FALSE

1.	ANS: T	PTS: 1	REF: 34
2.	ANS: T	PTS: 1	REF: 35
3.	ANS: F	PTS: 1	REF: 36
4.	ANS: F	PTS: 1	REF: 37
5.	ANS: T	PTS: 1	REF: 38
6.	ANS: T	PTS: 1	REF: 40
7.	ANS: F	PTS: 1	REF: 42
8.	ANS: F	PTS: 1	REF: 43
9.	ANS: F	PTS: 1	REF: 45
10.	ANS: T	PTS: 1	REF: 47
11.	ANS: T	PTS: 1	REF: 48
12.	ANS: F	PTS: 1	REF: 50
13.	ANS: T	PTS: 1	REF: 50-51
14.	ANS: F	PTS: 1	REF: 54
15.	ANS: F	PTS: 1	REF: 59
16.	ANS: T	PTS: 1	REF: 61
17.	ANS: F	PTS: 1	REF: 64
18.	ANS: F	PTS: 1	REF: 69
19.	ANS: T	PTS: 1	REF: 70-71
20.	ANS: F	PTS: 1	REF: 72
21.	ANS: T	PTS: 1	REF: 74
22.	ANS: T	PTS: 1	REF: 76
23.	ANS: F	PTS: 1	REF: 79
24.	ANS: F	PTS: 1	REF: 84
25.	ANS: F	PTS: 1	REF: 85

MULTIPLE CHOICE

26.	ANS: A	PTS: 1	REF: 34
27.	ANS: D	PTS: 1	REF: 35
28.	ANS: B	PTS: 1	REF: 36
29.	ANS: A	PTS: 1	REF: 37
30.	ANS: C	PTS: 1	REF: 38
31.	ANS: D	PTS: 1	REF: 40
32.	ANS: A	PTS: 1	REF: 42
33.	ANS: A	PTS: 1	REF: 44
34.	ANS: C	PTS: 1	REF: 45
35.	ANS: C	PTS: 1	REF: 45
36.	ANS: C	PTS: 1	REF: 47
37.	ANS: A	PTS: 1	REF: 48
38.	ANS: C	PTS: 1	REF: 50

39.	ANS: B	PTS: 1	REF: 53
40.	ANS: D	PTS: 1	REF: 54
41.	ANS: A	PTS: 1	REF: 57
42.	ANS: D	PTS: 1	REF: 58
43.	ANS: C	PTS: 1	REF: 59
44.	ANS: C	PTS: 1	REF: 62
45.	ANS: B	PTS: 1	REF: 64
46.	ANS: D	PTS: 1	REF: 69
47.	ANS: A	PTS: 1	REF: 70
48.	ANS: A	PTS: 1	REF: 71
49.	ANS: C	PTS: 1	REF: 75
50.	ANS: D	PTS: 1	REF: 78