C++ How to Program Early Objects Version 9th Edition Deitel Test Bank

Chapter 2: Introduction to C++ Programming; Input/Output and Operators

Section 2.2 First Program in C++: Printing a Line of Text

2.2 Q1: End-of-line comments that should be ignored by the compiler are denoted using:
   a. Two forward slashes (//).
   b. Three forward slashes (///).
   c. A slash and a star (/*).
   d. A slash and two stars (/**).
ANS: a. Two forward slashes (//).

2.2 Q2: Which of the following does *not* cause a syntax error to be reported by the C++ compiler?
   a. Mismatched {}.
   b. Missing */ in a comment.
   c. Missing ; at the end of a statement.
   d. Extra blank lines.
ANS: d. Extra blank lines.

2.2 Q3: Which of the following is *not* a syntax error?
   a. `std::cout << 'Hello world! ';`
   b. `std::cout << "Hello`
                       `world! ";`
   c. `std::cout << "Hello world! ";`
   d. `std::cout << Hello world!;`
ANS: c. `std::cout << "Hello world! ";`

2.2 Q4: The escape sequence for a newline is:
   a. `\n`
   b. `\t`
   c. `\r`
   d. `\a`
ANS: a. `\n`

2.2 Q5: Which of the following statements would display the phrase `C++ is fun`?
   a. `std::cout << "Thisis fun\rC++ ";`
   b. `std::cout << '++ is fun';`
   c. `std::cout << "\"C++ is fun\"";`
   d. `std::cout << C++ is fun;`
ANS: a. `std::cout << "Thisis fun\rC++ ";`

Section 2.3 Modifying Our First C++ Program

2.3 Q1: Which of the following is *not* a valid C++ identifier?
   a. `my Value`
   b. `_AAA1`
   c. `width`
   d. `m_x`
ANS: a. `my Value` (Identifiers may not contain blanks)

2.3 Q2: Which is the output of the following statements?

      `std::cout << "Hello ";`
      `std::cout << "World";`

   a. `Hello World`

b. `World Hello`
c. `Hello`
  `World`
d. `World`
  `Hello`

ANS: a. `Hello World`

2.3 Q3: Which of the following is the escape character?
a. `*`
b. `\`
c. `\n`
d. `"`

ANS: b. `\`

2.3 Q4: Which of the following code segments prints a single line containing `hello there` with the words separated by a single space?

a.
```
std::cout << "hello ";
std::cout << " there";
```
b.
```
std::cout << "hello" ,  " there";
```
c.
```
std::cout << "hello";
std::cout << "there";
```
d.
```
std::cout << "hello";
std::cout << " there";
```

ANS: d.
```
std::cout << "hello";
std::cout << " there";
```


Section 2.4 Another C++ Program: Adding Integers

2.4 Q1: Which of the following is a variable declaration statement?
a. `int total;`
b. `#include <iostream>`
c. `int main()`
d. `// first string entered by user`

ANS: a. `int total;`

2.4 Q2: The _____ object enables a program to read data from the user.
a. `std::cout.`
b. `std::cin.`
c. `std::cread.`
d. `std::cget.`

ANS:b. `std::cin.`

2.4 Q3: The assignment operator _____ assigns the value of the expression on its right to the variable on its left.
a. `<-`
b. `->`
c. `=`
d. `#`

ANS: c. =.

2.4 Q4: The `std::endl` stream manipulator_____.
a. inputs a newline.
b. flushes the output buffer.
c. outputs a newline and flushes the output buffer.
d. terminates the program.

ANS: c. outputs a newline and flushes the output buffer.

Section 2.5 Memory Concepts

2.5 Q1: Which of the following statements does *not* overwrite a preexisting value stored in a memory location?
    a. `int a;`
    b. `number = 12;`
    c. `y = y + 2;`
    d. `width = length;`
ANS: a. `int a;`

2.5 Q2: Which of the following statements could potentially change the value of `number2`?
    a. `std::cin >> number2;`
    b. `sum = number1 + number2;`
    c. `number1 = number2;`
    d. `std::cout << number2;`
ANS: a. `std::cin >> number2;`

Section 2.6 Arithmetic

2.6 Q1: What is the value of `result` after the following C++ statements execute?

```
int a, b, c, d, result;
a = 4;
b = 12;      c = 37;
d = 51;
result = d % a * c + a % b + a;
```

    a. 119
    b. 51
    c. 127
    d. 59
ANS: a. 119.

2.6 Q2: In what order would the following operators be evaluated

  `-, *, /, +, %`

Assume that if two operations have the same precedence, the one listed first will be evaluated first.
    a. `+, -, /, *, %`
    b. `-, +, %, *, /`
    c. `-, *, %, +, /`
    d. `*, /, %, -, +`
ANS: d. `*, /, %, -, +`

2.6 Q3: Which of the following is *not* an arithmetic operator?
    a. `+`
    b. `-`
    c. `=`
    d. `%`
ANS: c. =

Section 2.7 Decision Making: Equality and Relational Operators

2.7 Q1: What will be the output after the following C++ statements have been executed?

```
int a, b, c, d;
a = 4;
b = 12;
c = 37;
d = 51;

if ( a < b )
    cout << "a < b" << endl;

if ( a > b )
    cout << "a > b" << endl;

if ( d <= c )
    cout << "d <= c" << endl;

if ( c != d )
    cout << "c != d" << endl;
```

a. a < b
   c != d
b. a < b
   d <= c
   c != d
c. a > b
   c != d
d. a < b
   c < d
   a != b

ANS: a. a < b
        c != d

2.7 Q2: Which of the following *is* a compilation error?
   a. Neglecting to declare a local variable in a function before it is used.
   b. Using a triple equals sign instead of a double equals sign in the condition of an `if` statement.
   c. Omitting the left and right parentheses for the condition of an `if` statement.
   d. All of the above.

ANS: d. All of the above.

2.7 Q3: Each of the following is a relational or equality operator *except*:
   a. <=
   b. =!
   c. ==
   d. >

ANS: b. =!