

Starting Out with C++: Early Objects, 9th ed. (Gaddis, Walters & Muganda)

Chapter 2 Introduction to C++

Chapter 2 Test 1 Key

1) In a C++ program, two slash marks (`//`) indicate the beginning of

- A) a block of code.
- B) a comment.
- C) a variable definition.
- D) a program.
- E) none of the above.

Answer: B

2) `#include <iostream>` is an example of a(n)

- A) comment.
- B) I/O statement.
- C) preprocessor directive.
- D) stream directive.
- E) compiler option.

Answer: C

3) True/False: C++ is a case-sensitive language.

Answer: TRUE

4) The _____ is used to display information on the computer's screen.

- A) `<` symbol
- B) `cin` object
- C) `cout` object
- D) `print` object
- E) output object

Answer: C

5) Which of the following will cause the next output to begin on a new line?

- A) `cout << endl;`
- B) `cout << "endl";`
- C) `cout << "\n";`
- D) All of the above
- E) A and C, but not B

Answer: A

6) The _____ directive causes the contents of another file to be inserted into a program.

- A) `#getfile`
- B) `#library`
- C) `#insert`
- D) `#include`
- E) None of the above

Answer: D

7) True/False: A variable of the `char` data type can hold a set of characters like "January".

Answer: FALSE

8) You must have a(n) _____ for every variable you include in a program.

- A) purpose
- B) definition
- C) comment
- D) numeric value
- E) output statement

Answer: B

9) Which of the following is/are valid C++ identifiers?

- A) June-2010
- B) June.2010
- C) June_2010
- D) 2010June
- E) Both C and D.

Answer: C

10) _____ are data items whose values cannot change while the program is running.

- A) Literals
- B) Variables
- C) Fixed data
- D) Integers
- E) None of the above

Answer: A

11) True/False: The following two C++ statements perform the same operation.

```
wages = regPay + overTime;  
regPay + overTime = wages;
```

Answer: FALSE

12) Which of the following definitions will allow the variable `total` to hold floating-point values?

- A) `float total;`
- B) `double total;`
- C) `auto total = 0.0;`
- D) All of the above
- E) A and B, but not C

Answer: D

13) What value will be assigned to the variable `number` by the following statement?

```
int number = 7.8;
```

- A) 7
- B) 8
- C) 7.8
- D) None of the above.
- E) It's unpredictable. That's the problem.

Answer: A

14) If `number` is an `int` variable, both of the following statements will print out its value:

```
cout << number;  
cout << "number";
```

Answer: FALSE

15) What value will be assigned to the variable number by the following statement?

```
int number = 7.8;
```

- A) 7
- B) 8
- C) 7.8
- D) None of the above.
- E) It's unpredictable. That's the problem.

Answer: A

16) A C++ character literal is enclosed in _____ quotation marks, whereas a string literal is enclosed in _____ quotation marks.

- A) double, single
- B) triple, double
- C) open, closed
- D) single, double
- E) no, some

Answer: D

17) C++ automatically places _____ at the end of a string literal.

- A) a semicolon
- B) quotation marks
- C) the null terminator
- D) a newline escape sequence
- E) a blank

Answer: C

18) The `bool` data type

- A) can be used to store a single character.
- B) has only two values: true and false.
- C) is used to store extra-large numbers.
- D) is used to represent numbers in E notation.
- E) does none of the above.

Answer: B

19) The expression `5 / 2` evaluates to

- A) 1
- B) 2
- C) 2.5
- D) 5.2
- E) 10

Answer: B

20) The expression `5 % 2` evaluates to

- A) 1
- B) 2
- C) 2.5
- D) 5.2
- E) 10

Answer: A

Chapter 2 Test 2 Key

1) Every C++ program must have

- A) comments.
- B) variables.
- C) literals.
- D) a function called main..
- E) all of the above.

Answer: D

2) A _____ is used to mark the end of a complete C++ programming statement.

- A) comment
- B) period
- C) semicolon
- D) closing brace
- E) new line

Answer: C

3) Which of the following will cause the next output to begin on a new line?

- A) `cout << endl;`
- B) `cout << "endl";`
- C) `cout << "/n";`
- D) All of the above
- E) A and C, but not B

Answer: A

4) In programming terms, a group of characters inside a set of double quotation marks (" ") is called

- A) a character literal.
- B) a string literal.
- C) a character set.
- D) none of the above.
- E) any of the above.

Answer: B

5) True/False: The following two statements could be used interchangeably in a C++ program.

```
// Program Payroll
/* Program Payroll */
```

Answer: TRUE

6) A variable must be defined

- A) in every program.
- B) and initialized at the same time.
- C) in order to perform output.
- D) before it can be used.
- E) in all of the above cases.

Answer: D

7) True/False: The following statements both declare the variable num to be an integer.

```
int num;  
INT num;
```

Answer: FALSE

8) Which of the following definitions will allow the variable average to hold floating-point values?

- A) `float average;`
- B) `double average;`
- C) `auto average = 0.0;`
- D) All of the above
- E) A and B, but not C

Answer: D

9) What literal(s) appear in the following C++ statement?

```
int number = 4 + 8;
```

- A) number
- B) 4
- C) 8
- D) 12
- E) both B and C

Answer: E

10) Which of the following is/are valid C++ identifiers?

- A) `department_9`
- B) `aVeryLongVariableName`
- C) `last-name`
- D) All of the above.
- E) Both A and B, but not C.

Answer: E

11) Which of the following keywords is/are the names of C++ data types?

- A) `short`
- B) `long`
- C) `double`
- D) `bool`
- E) All of the above

Answer: E

12) _____ must be included in a program in order to use the `cout` object.

- A) Opening and closing braces
- B) The `iostream` header file
- C) A `cout` declaration
- D) Strings
- E) None of the above

Answer: B

13) True/False: The following is a legal C++ statement to define and initialize a variable.

```
char firstName = "Jack";
```

Answer: FALSE

14) A _____ variable can hold only one of two values: true or false.

- A) binary
- B) single precision
- C) T/F
- D) char
- E) bool

Answer: E

15) True/False: If a variable is defined as

```
int sum;
```

it may be written in the program code as sum or Sum, but not SUM.

Answer: FALSE

16) An operation that copies a value into a variable is called a(n) _____ operation.

- A) assignment
- B) equals
- C) copy
- D) declaration
- E) cout

Answer: A

17) What value will be assigned to the variable number by the following statement?

```
int number = 3.75;
```

- A) 3
- B) 4
- C) 3.75
- D) None of the above.
- E) It's unpredictable. That's the problem.

Answer: A

18) True/False: The following two statements both assign the value 5 to the variable dept.

```
5 = dept;  
dept = 5;
```

Answer: FALSE

19) The expression $7 \% 2$ evaluates to

- A) 1
- B) 3
- C) 3.5
- D) 7.2
- E) 14

Answer: A

20) The expression $7 / 2$ evaluates to

- A) 1
- B) 3
- C) 3.5
- D) 7.2
- E) 14

Answer: B

Chapter 2 Introduction to C++

Chapter 2 Test 1

- 1) In a C++ program, two slash marks (`//`) indicate the beginning of
 - A) a block of code.
 - B) a comment.
 - C) a variable definition.
 - D) a program.
 - E) none of the above.

- 2) `#include <iostream>` is an example of a(n)
 - A) comment.
 - B) I/O statement.
 - C) preprocessor directive.
 - D) stream directive.
 - E) compiler option.

- 3) True/False: C++ is a case-sensitive language.

- 4) The _____ is used to display information on the computer's screen.
 - A) `<` symbol
 - B) `cin` object
 - C) `cout` object
 - D) `print` object
 - E) output object

- 5) Which of the following will cause the next output to begin on a new line?
 - A) `cout << endl;`
 - B) `cout << "endl";`
 - C) `cout << "/n";`
 - D) All of the above
 - E) A and C, but not B

- 6) The _____ directive causes the contents of another file to be inserted into a program.
 - A) `#getfile`
 - B) `#library`
 - C) `#insert`
 - D) `#include`
 - E) None of the above

- 7) True/False: A variable of the `char` data type can hold a set of characters like "January".

8) You must have a(n) _____ for every variable you include in a program.

- A) purpose
- B) definition
- C) comment
- D) numeric value
- E) output statement

9) Which of the following is/are valid C++ identifiers?

- A) June-2010
- B) June.2010
- C) June_2010
- D) 2010June
- E) Both C and D.

10) _____ are data items whose values cannot change while the program is running.

- A) Literals
- B) Variables
- C) Fixed data
- D) Integers
- E) None of the above

11) True/False: The following two C++ statements perform the same operation.

```
wages = regPay + overTime;  
regPay + overTime = wages;
```

12) Which of the following definitions will allow the variable `total` to hold floating-point values?

- A) `float total;`
- B) `double total;`
- C) `auto total = 0.0;`
- D) All of the above
- E) A and B, but not C

13) What value will be assigned to the variable `number` by the following statement?

```
int number = 7.8;
```

- A) 7
- B) 8
- C) 7.8
- D) None of the above.
- E) It's unpredictable. That's the problem.

14) If `number` is an `int` variable, both of the following statements will print out its value:

```
cout << number;  
cout << "number";
```


15) What value will be assigned to the variable number by the following statement?

```
int number = 7.8;
```

- A) 7
- B) 8
- C) 7.8
- D) None of the above.
- E) It's unpredictable. That's the problem.

16) A C++ character literal is enclosed in _____ quotation marks, whereas a string literal is enclosed in _____ quotation marks.

- A) double, single
- B) triple, double
- C) open, closed
- D) single, double
- E) no, some

17) C++ automatically places _____ at the end of a string literal.

- A) a semicolon
- B) quotation marks
- C) the null terminator
- D) a newline escape sequence
- E) a blank

18) The `bool` data type

- A) can be used to store a single character.
- B) has only two values: true and false.
- C) is used to store extra-large numbers.
- D) is used to represent numbers in E notation.
- E) does none of the above.

19) The expression `5 / 2` evaluates to

- A) 1
- B) 2
- C) 2.5
- D) 5.2
- E) 10

20) The expression `5 % 2` evaluates to

- A) 1
- B) 2
- C) 2.5
- D) 5.2
- E) 10

Chapter 2 Test 2

1) Every C++ program must have

- A) comments.
- B) variables.
- C) literals.
- D) a function called `main`.
- E) all of the above.

2) A _____ is used to mark the end of a complete C++ programming statement.

- A) comment
- B) period
- C) semicolon
- D) closing brace
- E) new line

3) Which of the following will cause the next output to begin on a new line?

- A) `cout << endl;`
- B) `cout << "endl";`
- C) `cout << "\n";`
- D) All of the above
- E) A and C, but not B

4) In programming terms, a group of characters inside a set of double quotation marks (" ") is called

- A) a character literal.
- B) a string literal.
- C) a character set.
- D) none of the above.
- E) any of the above.

5) True/False: The following two statements could be used interchangeably in a C++ program.

```
// Program Payroll
/* Program Payroll */
```

6) A variable must be defined

- A) in every program.
- B) and initialized at the same time.
- C) in order to perform output.
- D) before it can be used.
- E) in all of the above cases.

7) True/False: The following statements both declare the variable num to be an integer.

```
int num;  
INT num;
```

8) Which of the following definitions will allow the variable average to hold floating-point values?

- A) float average;
- B) double average;
- C) auto average = 0.0;
- D) All of the above
- E) A and B, but not C

9) What literal(s) appear in the following C++ statement?

```
int number = 4 + 8;
```

- A) number
- B) 4
- C) 8
- D) 12
- E) both B and C

10) Which of the following is/are valid C++ identifiers?

- A) department_9
- B) aVeryLongVariableName
- C) last-name
- D) All of the above.
- E) Both A and B, but not C.

11) Which of the following keywords is/are the names of C++ data types?

- A) short
- B) long
- C) double
- D) bool
- E) All of the above

12) _____ must be included in a program in order to use the cout object.

- A) Opening and closing braces
- B) The iostream header file
- C) A cout declaration
- D) Strings
- E) None of the above

Answer: B

13) True/False: The following is a legal C++ statement to define and initialize a variable.

```
char firstName = "Jack";
```

14) A _____ variable can hold only one of two values: true or false.

- A) binary
- B) single precision
- C) T/F
- D) char
- E) bool

15) True/False: If a variable is defined as

```
int sum;
```

it may be written in the program code as sum or Sum, but not SUM.

16) An operation that copies a value into a variable is called a(n) _____ operation.

- A) assignment
- B) equals
- C) copy
- D) declaration
- E) cout

17) What value will be assigned to the variable number by the following statement?

```
int number = 3.75;
```

- A) 3
- B) 4
- C) 3.75
- D) None of the above.
- E) It's unpredictable. That's the problem.

18) True/False: The following two statements both assign the value 5 to the variable dept.

```
5 = dept;  
dept = 5;
```

19) The expression $7 \% 2$ evaluates to

- A) 1
- B) 3
- C) 3.5
- D) 7.2
- E) 14

20) The expression $7 / 2$ evaluates to

- A) 1
- B) 3
- C) 3.5
- D) 7.2
- E) 14