Capitulo 4

This activity contains 30 questions.

1. *Section 4.2 Algorithms*

4.2 Q1: Specifying the order in which statements are to be executed in a computer program is called:

- ◯ *Transfer of control.*
- ◯ *Program control.*
- ◯ *An algorithm.*
- ◯ *Pseudocode.*

2. *4.3 Q1: Which of the following is true of a pseudocode program?*

- ◯ *All of the above are false.*
- ◯ *They include declarations and all types of statements.*
- ◯ *They are executed by the computer.*
- ◯ *They help the programmer "think out" a program.*

3. *4.3 Q2: Pseudocode does not include:*

- ◯ *Declarations.*
- ◯ *Input/output.*
- ◯ *Algorithms.*
- ◯ *Control structures.*

4. *Section 4.4 Control Structures*

4.4 Q1: Which of the following encompasses the other three?

- ◯ *Repetition structure.*
- ◯ *Control structure.*
- ◯ *Selection structure.*
- ◯ *Sequence structure.*

5. *Sequence Structure in C++*

4.4 Q2: In an activity diagram for an algorithm, what does a solid circle surrounded by a hollow circle represent?

- *Action state.*
- *Transition.*
- *Initial state.*
- *Final state.*

6. *Selection Statements in C++*

4.4 Q3: Which of the following is a double-selection statement?

- *if.*
- *if…else.*
- *do…while.*
- *switch.*

7. *Repetition Statements in C++*

4.4 Q4: Which of the following is a repetition structure?

- *if.*
- *if…else.*
- *do…while.*
- *switch.*

8. *Section 4.5 if Selection Statements*

4.5 Q1: If grade has the value of 60, what will the following code print?

```
If ( grade >= 60 )
        Cout << "Passed";
```

- *cout << "Passed";.*
- *c. Passed.*
- *nothing.*
- *60.*

9. *4.5 Q2: The data type bool:*

- *Can take on any expression as a value.*
- *Can take on values true and false.*
- *Can only be used in a selection statement.*
- *Can take on values -1, 0 or 1.*

10. *Section 4.6 if…else Double-Selection Statement*

Conditional Operator (?:)

4.6 Q1: The conditional operator (?:):

- *Accepts two operands.*
- *Is a unary operator.*
- *Associates from left to right.*
- *Is the only ternary operator in C++.*

11. *4.6 Q2: Which of the following does not perform the following task: print correct if answer is equal to 7 and incorrect if answer is not equal to 7?*

- ```
  If ( answer == 7 )
     cout << "correct";
  else
     cout << "incorrect";
  ```
- *answer == 7 ? cout << "correct" : cout << "incorrect";*
- *cout << answer == 7 ? "correct" : "incorrect";*
- *cout << (answer == 7 ? "correct" : "incorrect");*

12. *Blocks*

4.6 Q3: A block:

- *Must contain exactly three statements.*
- *Is a compound statement.*
- *Is represented by placing a semicolon (;) where a statement would normally be.*
- *Cannot contain declarations.*

Section 4.7 while Repetition Statement
  ```

13. *4.7 Q1: What is wrong with the following while loop?*

```
while ( sum <= 1000 )
sum = sum - 30;
```

- *There should be a semicolon after while (sum <= 1000).*
- *sum = sum – 30 should be sum = sum + 30 or else the loop may never end.*
- *Braces are required around sum = sum – 30;.*
- *The parentheses should be braces.*

14. *4.7 Q2: How many times will the following loop print hello?*

```
i = 1;
while ( i <= 10 )
        cout << "hello";
```

- *10.*
- *0.*
- *An infinite number of times.*
- *9.*

15. *Section 4.8 Formulating Algorithms: Counter-Controlled Repetition*

4.8 Q1: An uninitialized local variable contains:

- *No value.*
- *A randomly assigned value.*
- *A value of zero.*
- *The value last stored in the memory location reserved for that variable.*

16. *4.8 Q2: Using a loop's counter-control variable in a calculation after the loop ends often causes a common logic error called:*

- *A fatal logic error.*
- *A syntax error.*
- *An off-by-one error.*
- *A counter exception.*

17. *Section 4.9 Formulating Algorithms: Sentinel-Controlled Repetition*

4.9 Q1: Indefinite repetition is controlled by a:

- *Counter.*
- *Absence of a condition.*
- *Sentinel value.*
- *Non-constant condition.*

18. *4.9 Q2: A fatal logic error can be caused by:*

- *An attempt to divide by zero.*
- *Not initializing variables before executing a repetition structure.*
- *Choosing a sentinel value that is also a data value.*
- *Using a counter variable in a calculation after the loop.*

19. *4.9 Q3: In indefinite repetition, an input value:*

- *Should always be evaluated before being processed.*
- *Can be entered, processed, and evaluated in any order.*
- *Should always be processed directly after it is entered.*
- *Should never be modified.*

20. *4.9 Q4: What is the final value of x after performing the following operations?*

```
int x = 21;
double y = 6;
double z = 14;
y = x / z;
x = 5.5 * y;
```

- *5.5.*
- *8.25.*
- *5.*
- *8.*

4.9 Q5: Which operation does not take place in the following

21. *example?*

```
int x = 21;
double y = 6;
double z = 14;
y = x / z;
x = 5.5 * y;
```

- *Implicit conversion.*
- *Explicit conversion.*
- *Promotion.*
- *Truncation.*

22. *Section 4.10 Formulating Algorithms: Nested Control Statements*

4.10 Q1: Having a loop within a loop is known as:

- *A redundancy.*
- *Nesting.*
- *Doubling up.*
- *Recursive.*

23. *4.10 Q2: To handle situations where a loop must reinitialize a variable at the beginning of each iteration, such reinitialization could be performed by:*

- *A declaration inside the loop body.*
- *An assignment statement before the loop body.*
- *An assignment statement after the loop body.*
- *A declaration after the loop body.*

24. *Section 4.11 Assignment Operators*

4.11 Q1: If x initially contains the value 3, which of the following sets x to 7?

- *x + 4 = x;.*
- *x ++ 4;.*
- *x += 4;.*
- *x =+ 4;.*

25. *4.11 Q2: Assuming that x and y are equal to 3 and 2, respectively, after the statement x -= y executes, the values of x and y will be:*

- *x: 3; y: -1.*
- *x: 5; y: 3.*
- *x: 3; y: 5.*
- *x: 1; y: 2.*

26. *Section 4.12 Increment and Decrement Operators*

4.12 Q1: Which of the following will not increment c by 1?

- *c++;.*
- *++c;.*
- *c += 1;.*
- *c + 1;.*

27. *4.12 Q2: Assuming that x is equal to 4, which of the following statements will not result in y containing the value 5 after execution?*

- *y = ++x;.*
- *y = x++;.*
- *y = 5;.*
- *d. y = x + 1.*

28. *4.12 Q3: Which of the following operations has the highest precedence?*

- *Assignment.*
- *Addition.*
- *Multiplication.*
- *Postincrement.*

29. *Section 4.13 (Optional) Software Engineering Case Study: Identifying Class Attributes in the ATM System*

4.13 Q1: Which of the following is not a piece of information that could be found in the attribute compartment of a class's rectangle in the UML?

- *The attribute's memory location.*

- *The attribute's type.*
- *The attribute's initial value.*
- *The attribute's name.*

30. *4.13 Q2: A class-type attribute is best modeled by:*

- *An inheritance association.*
- *Breaking the class down into its fundamental-type components.*
- *A composition association.*
- *Encapsulating both classes in a third, larger class.*

Clear Answers / Start Over Submit Answers for Grading

Answer choices in this exercise appear in a different order each time the page is loaded.

PEARSON

Copyright © 1995 - 2010 Pearson Education . All rights reserved.
Legal Notice | Privacy Policy | Permissions