**Discussion Questions Chapter 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 A(n) \_\_\_\_ statement is the decision structure you use when you need to take one or the other of two possible courses of action.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | Boolean | b. | dual-alternative if | |  | c. | single-alternative if | d. | if…else |  |  |  | | --- | --- | | *ANSWER: d. if…else*  *REFERENCES:* | 251 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2  When you execute an if…else statement, only one of the resulting actions takes place depending on the evaluation of the \_\_\_\_ following the if.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | Boolean expression | b. | keyword | |  | c. | else statement | d. | independent statement |  |  |  | | --- | --- | | *ANSWER:  a. Boolean statement* |  | | *POINTS:* | 1 | | *REFERENCES:* | 252 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. When you place a block within an if statement, it is crucial to place the \_\_\_\_ correctly.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | periods | b. | angle brackets | |  | c. | commas | d. | curly braces |  |  |  | | --- | --- | | *ANSWER:  d. curly braces* |  | | *POINTS:* | 1 | | *REFERENCES:* | 255 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. Just as you can block statements that depend on an if, you can also block statements that depend on a(n) \_\_\_\_.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | Boolean expression | b. | else | |  | c. | constant | d. | operator |  |  |  | | --- | --- | | *ANSWER:  b. else* |  | | *POINTS:* | 1 | | *REFERENCES:* | 257 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5  When you block statements, you must remember that any \_\_\_\_ you declare within a block is local to that block.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | method | b. | expression | |  | c. | variable | d. | decision |  |  |  | | --- | --- | | *ANSWER:  c. variable* |  | | *POINTS:* | 1 | | *REFERENCES:* | 258 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6  Statements in which an if structure is contained inside another if structure are commonly called \_\_\_\_ if statements.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | nested | b. | logical | |  | c. | blocked | d. | inside |  |  |  | | --- | --- | | *ANSWER:  a. nested* |  | | *POINTS:* | 1 | | *REFERENCES:* | 260 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. The compiler does not take indentation into account when compiling code, but consistent indentation can help readers understand a program’s \_\_\_\_.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | machine language | b. | class | |  | c. | decision | d. | logic |  |  |  | | --- | --- | | *ANSWER:  d. logic* |  | | *POINTS:* | 1 | | *REFERENCES:* | 262 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 The AND operator is written as two \_\_\_\_.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | plus signs | b. | equal signs | |  | c. | ampersands | d. | asterisks |  |  |  | | --- | --- | | *ANSWER:  c. ampersands* |  | | *POINTS:* | 1 | | *REFERENCES:* | 264 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 When you use the && operator, you must include a complete \_\_\_\_\_ on each side.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | mathematical expression | b. | Boolean expression | |  | c. | variable | d. | operator |  |  |  | | --- | --- | | *ANSWER:  b. Boolean expression* |  | | *POINTS:* | 1 | | *REFERENCES:* | 264 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10  You can use the \_\_\_\_, which is written as ||, if you want some action to occur when at least one of two conditions is true.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | conditional OR operator | b. | logical AND operator | |  | c. | range check | d. | switch statement |  |  |  | | --- | --- | | *ANSWER:  a. conditional OR operator* |  | | *POINTS:* | 1 | | *REFERENCES:* | 265 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11  A(n) \_\_\_\_ is a series of if statements that determine whether a value falls within a specified range.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | scope check | b. | if check | |  | c. | range test | d. | range check |  |  |  | | --- | --- | | *ANSWER:  d. range check* |  | | *POINTS:* | 1 | | *REFERENCES:* | 270 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 The \_\_\_\_ statement is useful when you need to test a single variable against a series of exact integer, character, or string values.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | switch | b. | if | |  | c. | else | d. | break |  |  |  | | --- | --- | | *ANSWER:  a. switch* |  | | *POINTS:* | 1 | | *REFERENCES:* | 275 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 You can leave out the \_\_\_\_ statements in a switch structure.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | break | b. | switch | |  | c. | if | d. | case |  |  |  | | --- | --- | | *ANSWER:  a. break* |  | | *POINTS:* | 1 | | *REFERENCES:* | 276 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 The \_\_\_\_ requires three expressions separated with a question mark and a colon.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | flowchart | b. | conditional operator | |  | c. | sequence structure | d. | conditional statement |  |  |  | | --- | --- | | *ANSWER:  b. conditional operator* |  | | *POINTS:* | 1 | | *REFERENCES:* | 280 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 The \_\_\_\_ operator is written as the exclamation point ( ! ).   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | equality | b. | AND | |  | c. | assignment | d. | NOT |  |  |  | | --- | --- | | *ANSWER: d. NOT*  *REFERENCES:* | 281 | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 The \_\_\_\_ operator is always evaluated before the OR operator.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | a. | Assignment | b. | AND | |  | c. | Conditional | d. | Logical |  |  |  | | --- | --- | | *ANSWER:  b. AND > Logical AND, NOT* |  | | *POINTS:* | 1 | | *REFERENCES:* | 282-283 | |