**Question 1**(1 point)

Multiple Boolean expressions can be combined by using a logical operator to create \_\_\_\_\_\_\_\_ expressions.

Question 1 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | compound | |
|  | |  |  | | --- | --- | | B) | sequential | |
|  | |  |  | | --- | --- | | C) | mathematical | |
|  | |  |  | | --- | --- | | D) | logical | |

**Question 2**(1 point)

What is the result of the following Boolean expression, given that **x = 5**, **y = 3**, and **z= 8**?  
**not (x < y or z > x) and y < z**

Question 2 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **True** | |
|  | |  |  | | --- | --- | | B) | **5** | |
|  | |  |  | | --- | --- | | C) | **8** | |
|  | |  |  | | --- | --- | | D) | **False** | |

**Question 3**(1 point)

The **if** statement causes one or more statements to execute only when a Boolean expression is true.

Question 3 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 4**(1 point)

Which logical operators perform short-circuit evaluation?

Question 4 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **or**, **and** | |
|  | |  |  | | --- | --- | | B) | **and**, **or**, **not** | |
|  | |  |  | | --- | --- | | C) | **not**, **and** | |
|  | |  |  | | --- | --- | | D) | **or**, **not** | |

**Question 5**(1 point)

Python uses the same symbols for the assignment operator as for the equality operator.

Question 5 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 6**(1 point)

Expressions that are tested by the **if** statement are called Boolean expressions.

Question 6 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 7**(1 point)

The Python language is not sensitive to block structuring of code (i.e., indentation isn't required).

Question 7 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 8**(1 point)

*Saved*

In Python the \_\_\_\_\_\_\_\_ symbol is used as the not-equal-to operator.

Question 8 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **==** | |
|  | |  |  | | --- | --- | | B) | **<=** | |
|  | |  |  | | --- | --- | | C) | **!=** | |
|  | |  |  | | --- | --- | | D) | **<>** | |

**Question 9**(1 point)

An action in a single alternative decision structure is performed only when the condition is true.

Question 9 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 10**(1 point)

Python allows you to compare strings, but it is not case sensitive.

Question 10 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 11**(1 point)

A Boolean variable can reference one of two values which are \_\_\_\_\_\_\_\_\_\_.

Question 11 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **yes** or **no** | |
|  | |  |  | | --- | --- | | B) | **True** or **False** | |
|  | |  |  | | --- | --- | | C) | **T** or **F** | |
|  | |  |  | | --- | --- | | D) | **Y** or **N** | |

**Question 12**(1 point)

The decision structure that has two possible paths of execution is known as \_\_\_\_\_\_\_\_\_\_.

Question 12 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | two alternative | |
|  | |  |  | | --- | --- | | B) | single alternative | |
|  | |  |  | | --- | --- | | C) | double alternative | |
|  | |  |  | | --- | --- | | D) | dual alternative | |

**Question 13**(1 point)

When using the \_\_\_\_\_\_\_\_ logical operator, both subexpressions must be true for the compound expression to be true.

Question 13 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **not** | |
|  | |  |  | | --- | --- | | B) | **and** | |
|  | |  |  | | --- | --- | | C) | either **or** or **and** | |
|  | |  |  | | --- | --- | | D) | **or** | |

**Question 14**(1 point)

*Saved*

In Python the \_\_\_\_\_\_\_\_ symbol is used as the equality operator.

Question 14 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **==** | |
|  | |  |  | | --- | --- | | B) | **<>** | |
|  | |  |  | | --- | --- | | C) | **!=** | |
|  | |  |  | | --- | --- | | D) | **<=** | |

**Question 15**(1 point)

*Saved*

When using the \_\_\_\_\_\_\_\_ logical operator, one or both of the subexpressions must be true for the compound expression to be true.

Question 15 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **or** | |
|  | |  |  | | --- | --- | | B) | **maybe** | |
|  | |  |  | | --- | --- | | C) | **and** | |
|  | |  |  | | --- | --- | | D) | **not** | |

**Question 16**(1 point)

*Saved*

What is the result of the following Boolean expression, given that **x = 5**, **y = 3**, and **z = 8**?  
**x < y and z > x**

Question 16 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **False** | |
|  | |  |  | | --- | --- | | B) | **5** | |
|  | |  |  | | --- | --- | | C) | **True** | |
|  | |  |  | | --- | --- | | D) | **8** | |

**Question 17**(1 point)

*Saved*

Nested decision statements are one way to test more than one condition.

Question 17 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 18**(1 point)

Short-circuit evaluation is only performed with the **not** operator.

Question 18 options:

|  |  |
| --- | --- |
|  | True |
|  | False |

**Question 19**(1 point)

Which of the following is the correct **if** clause to determine whether **choice** is anything other than **10**?

Question 19 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **if not(choice < 10 and choice > 10):** | |
|  | |  |  | | --- | --- | | B) | **if choice <> 10:** | |
|  | |  |  | | --- | --- | | C) | **if choice != 10:** | |
|  | |  |  | | --- | --- | | D) | **if choice != 10** | |

**Question 20**(1 point)

*Saved*

What does the following expression mean?  
**x <= y**

Question 20 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **x is greater than or equal to y** | |
|  | |  |  | | --- | --- | | B) | **x is less than y** | |
|  | |  |  | | --- | --- | | C) | **x is less than or equal to y** | |
|  | |  |  | | --- | --- | | D) | **x is greater than y** | |

**Question 21**(1 point)

*Saved*

Which of the following is the correct **if** clause to determine whether **y** is in the range **10**through **50**, inclusive?

Question 21 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **if 10 > y and y < 50:** | |
|  | |  |  | | --- | --- | | B) | **if 10 < y or y > 50:** | |
|  | |  |  | | --- | --- | | C) | **if y >= 10 or y <= 50:** | |
|  | |  |  | | --- | --- | | D) | **if y >= 10 and y <= 50:** | |

**Question 22**(1 point)

What is the result of the following Boolean expression, given that **x = 5**, **y = 3**, and **z = 8**?  
**x < y or z > x**

Question 22 options:

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  | | --- | --- | | A) | **8** | |
|  | |  |  | | --- | --- | | B) | **False** | |
|  | |  |  | | --- | --- | | C) | **5** | |
|  | |  |  | | --- | --- | | D) | **True** | |