Congratulations, you have completed this quiz!

Quiz Results: Python Basics

Pass

90% Correct

1. **1)** Which of the following would NOT change the length of the `foods` list? The `foods` list contains 3 items already.

   Correct

   ### Correct answer

   foods + ['orange']

   ### Explanation

   List concatenation without reassigning the variable is the only option that doesn't increase the length of the original list.

   ### Further Reading

   https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/7/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/7/module/158)

2. **2)** Which of these can be used as a key in a dictionary? (Choose all that apply)

   Correct

Correct answer (https://linuxacademy.com/cp/dashboard) (1, 2), 'Kevin', 1 (https://www.cloudassessments.com/c/#/dashboard) (https://scaleyourcode.com)

Explanation

Any value that is immutable (can't be changed) can be used as a key in a dictionary. Since lists can be modified, they are not usable as keys.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/8/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/8/module/158)

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3. **3)** Which of these `for` loop declarations is NOT valid? (Choose all that apply)

Correct

Correct answer

for x, y in [1, 2, 3]:, for i = 0; i < 10; i++:

Explanation

The "for i = 0..." solution isn't valid in Python at all. The "for x, y in [1, 2, 3]" fails because you can't unpack an integer into 2 separate values. "for x, y in [(1, 2), (2, 3), (3, 4)]" works because you can unpack a tuple of length two into two separate values like this: a, b = (1, 2)

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158)

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4. **4)** Which of these values would cause an `if` block to execute if used as the `if` statement's conditional? (Choose all that apply)

Incorrect

Correct answer

"test", [1, 2]

Explanation

Any expression that evaluates to True when used as the argument to the `bool` function would be equivalent to True in an if statement.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/9/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/9/module/158)

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5. **5)** Which of these "is" comparisons will return True? (Choose all that apply)

Correct

Correct answer

1 is 1, 'a' is 'a'

Explanation

The "is" operator only returns True if both sides are the exact same object. Since both ints and strings are immutable types Python considers two identical ints or strings to be the same object.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/11/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/11/module/158)

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6. **6)** Which of these would have a float as the result? (Choose all that apply)

Correct

Correct answer

2.0 / 3, float(6 * 3)

Explanation

Performing any math operation where one of the numbers is a float will result in a float. You can also convert an item to a float using the `float()` function.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158)

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7. **7)** How would you get every item with an even index (0, 2, 4, etc.) from a list using slicing?

Correct

Correct answer

my_list[::2]

Explanation

The optional, third value of a slice is the "step" value. `my_list[::2]` will gather the items from the beginning of the list to the end of the list skipping every second item.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/7/module/158 (https://linuxacademy.com

8. **8)** How do you exit the Python REPL? (Choose all that apply)

Correct

Correct answer

enter "exit()", hit "ctrl+d"

Explanation

The "exit()" function needs to be called, or Ctrl-D hit, to exit the Python REPL. Hitting Ctrl-C is a key interrupt but won't close the REPL. Entering "exit" without parentheses will display a message stating that you need to use parentheses.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/1/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/1/module/158)

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9. **9)** What are valid booleans in Python? (Choose all that apply)

Correct

Correct answer

False, True

Explanation

The boolean objects that you'll use in Python are the constants True and False.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/5/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/5/module/158)

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10. **10)** What does REPL stand for?

Correct

Correct answer

Read Evaluate Print Loop

Explanation

REPL stands for "Read Evaluate Print Loop". This means that each line is calculated and the result is printed to the screen before putting the user back at a prompt.

Further Reading

11. **11)** How would you get the lowercase version of a string?

Correct

Correct answer

"SOMETHING".lower()

Explanation

Knowing how to lowercase a string is important because you'll likely want to compare strings regardless of how they were typed. You do this in Python by calling the ".lower()" method on string.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158)

12. **12)** Which of these operations will return True? (Choose all that apply)

Correct

Correct answer

1 in ['a', 1, 'b'], 0 or True

Explanation

The example `1 in ['a', 1, 'b']` would return True because the item 1 exists in the list. The example `0 or True` would return True because "or" will return the first truthy value (True in this case) or the last false value.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/11/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/11/module/158)

13. **13)** How would you get the value of the key 'color' from a dictionary called 'favorites'?

Correct

Correct answer

favorites['color']

Explanation

To read a value from a dictionary, you will use the subscript operator with the exact key ("color").

Further Reading

(https://linuxacademy.com /cp/dashboard) (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/8/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/8/module/158) (https://www.cloudassessments.com /c/#/dashboard) (https://scaleyourcode.com)

14. **14)** What of these shebangs can you use to utilize the system Python on a CentOS system?

Correct

Correct answer

#!/bin/python

Explanation

For CentOS, the default Python executable can be found at /bin/python.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/2/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/2/module/158)

15. **15)** How can you run a non-executable Python file?

Correct

Correct answer

python file.py

Explanation

If you want to run a single Python file, you can use it as the first argument to the python CLI. Not passing a file name would put you into a REPL.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/2/module/158 (https://linuxacademy.com /cp/courses/lesson/course/1486/lesson/2/module/158)

16. **16)** What type of loop is used to create an infinite loop?

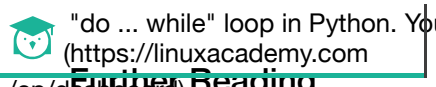
Correct

Correct answer

A "while" loop.

Explanation

A "while" loop will continue as long as the condition is True and no "break" line exists in the loop. There is no



"do ... while" loop in Python. You use a "for" loop to iterate over something that has a length.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158)

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17. **17)** What is the file extension for Python?

Correct

Correct answer

.py

Explanation

The standard file extension for a Python source file is ".py", but you can remove this extension when you create an executable with a shebang.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/2/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/2/module/158)

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18. **18)** Which of these types can be iterated over? (Choose all that apply)

Correct

Correct answer

dictionary, string, list

Explanation

Strings, dictionaries, tuples, and lists are all examples of types that can be iterated over using a "for" loop in Python.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/10/module/158)

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19. **19)** What value represents nothingness in Python?

Correct

Correct answer

None

Explanation

Unlike many languages that use the terms null or nil to represent the idea of nothingness, Python uses the constant None.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/5/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/5/module/158)

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20. **20)** What would the result of 4 * '1.1' be?

Correct

Correct answer

'1.11.11.11.1'

Explanation

Multiplying an int by a string, or a string by an int, results in a new string that is the original string concatenated to itself the specific number of times.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158)

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21. **21)** When can you use a comment in Python? (Choose all that apply)

Correct

Correct answer

At the beginning of a line., After the final expression on a line., At the beginning of a file.

Explanation

There aren't too many places that you can't use a comment in Python, but as a rule of thumb, you should only use them on their own lines or after all of the code on a line.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/3/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/3/module/158)

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22. **22)** Which of these are valid strings? (Choose all that apply)

Incorrect

Correct answer

"Hello 'Doug'", "It's time to\nrock"

Explanation

The first and last quote that create a string must match, either as double or single quotes, and if there are quotes within the string, they must be escaped with a \, unless they are the opposite type of quote from the outer quotes.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/4/module/158)

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23. **23)** Which tuples could be used in `print("%s %s" % my_tuple)` without causing an error? (Choose all that apply)

Correct

Correct answer

('a', 'b'), (2.0, 3.0)

Explanation

The tuple used in string substitution must have the same number of elements as there are variables in the string. In this case, all tuples with two elements would work.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/7/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/7/module/158)

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24. **24)** What keyword is used for a second "if" in an if/else chain?

Correct

Correct answer

elif

Explanation

It's not a word, but the value used for a second "if" in Python is "elif" (short for "else if").

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/9/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/9/module/158)

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25. **25)** How would you create a new variable with the value "test"?

Correct

Correct answer (https://linuxacademy.com/cp/dashboard)

(https://www.cloudassessments.com/c/#/dashboard)

(https://scaleyourcode.com)

Explanation

The assignment operator in Python is a single "=" and will be used to create or set the value of variables. Python is also a dynamic programming language, so you don't need to explicitly provide a type for your variables.

Further Reading

https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/6/module/158 (https://linuxacademy.com/cp/courses/lesson/course/1486/lesson/6/module/158)

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