

Questions

1. You install Python version 3.8.1 on an operating system that already has Python version 2.7 installed. What command do you issue at the command prompt to run Python version 3.8.1?
 - A. python
 - B. python3.8.1
 - C. python3.8
 - D. python 3
2. What utility comes bundled with Python to give you an interface to the Interactive Interpreter and uses straight quotes (instead of open and close quotes) along with color coding of commands, all of which help you better enter Python commands?
 - A. Bash
 - B. vi
 - C. Emacs
 - D. IDLE
3. Identify the data type of the following: True
 - A. String
 - B. Floating Point
 - C. Boolean
 - D. Integer
4. Currently, you have a variable of x assigned an integer value of 4. However, you need to convert your variable of x to a string data type. Which of the following commands could you use?
 - A. x=string(x)
 - B. x=int("x")
 - C. x=str(x)
 - D. x=float(x)
5. You have a Python list named "inventory" and wish to display the last value in the list. What Python command could you use?
 - A. print(inventory[-1])
 - B. print(inventory.end)
 - C. print(inventory[0])
 - D. print[inventory.end]

6. Which of the following best describes a Python Dictionary?
- A. An ordered set of name/value pairs enclosed in straight brackets
 - B. An unordered set of name/value pairs enclosed in straight brackets
 - C. An ordered set of name/value pairs enclosed in curly brackets
 - D. An unordered set of name/value pairs enclosed in curly brackets
7. You're writing a Python script and wish to ask the user the name of the SSID in a wireless network, and you want to assign their response to a variable of ssid. Which command can you use?
- A. `ssid=input("What is the name of the SSID? ")`
 - B. `input=ssid("What is the name of the SSID? ")`
 - C. `ssid=input["What is the name of the SSID? "]`
 - D. `ssid=input(What is the name of the SSID?)`
8. Python uses the "if" function to do a Boolean evaluation. What Python function can be used with the "if" function to do a secondary Boolean evaluation if the first evaluation (as specified by the "if" function) is False?
- A. else
 - B. elif
 - C. iff
 - D. elseif
9. Which if the following identifies two types of Python Loops?
- A. FOR and NEXT
 - B. WHILE and IF
 - C. FOR and WHILE
 - D. INFINITE and IF
10. In a Python script, you wish to open a file named "vlans.txt" in a mode that will let you write additional VLAN values to the file without overwriting the existing values already in the file. Which command could you use?
- A. `file=open("vlans.txt","r")`
 - B. `file=open("vlans.txt","rw")`
 - C. `file=open("vlans.txt","w")`
 - D. `file=open("vlans.txt","a")`

Questions and Answers

1. You install Python version 3.8.1 on an operating system that already has Python version 2.7 installed. What command do you issue at the command prompt to run Python version 3.8.1?
 - A. python
 - B. python3.8.1
 - C. python3.8
 - D. python 3

Answer: C

Explanation: If you issue the “python” command, it will run the preinstalled version of 2.7. Issuing the command “python3.8.1” will not work, because you’re specifying the version too many levels deep. However, issuing the command “python3.8” will run Python version 3.8.1 in this case. Also, the command “python3” would have worked, but not “python 3,” because there is a space before the “3.”

Video Reference: 6.2.1 Installing Python

2. What utility comes bundled with Python to give you an interface to the Interactive Interpreter and uses straight quotes (instead of open and close quotes) along with color coding of commands, all of which help you better enter Python commands?
 - A. Bash
 - B. vi
 - C. Emacs
 - D. IDLE

Answer: D

Explanation: IDLE (Interactive DeveLopment Environment) is a utility that comes with Python and serves as an excellent interface to Python’s Interactive Interpreter, as compared to an operating system’s command prompt. Bash is a UNIX shell, while both vi and Emacs are UNIX editors.

Video Reference: 6.2.2 The Interactive Interpreter

3. Identify the data type of the following: True
 - A. String
 - B. Floating Point
 - C. Boolean
 - D. Integer

Answer: C

Explanation: Since the word True is not in quotes, it's not a String data type. Instead, it's a Boolean data type that states if a condition is True or False.

Video Reference: 6.2.3 Data Types

4. Currently, you have a variable of x assigned an integer value of 4. However, you need to convert your variable of x to a string data type. Which of the following commands could you use?

- A. `x=string(x)`
- B. `x=int("x")`
- C. `x=str(x)`
- D. `x=float(x)`

Answer: C

Explanation: The str function can convert an integer or floating-point value to a string. The int function can convert a floating-point value to an integer, and the float function can convert an integer to a floating-point value.

Video Reference: 6.2.4 Data Type Conversions

5. You have a Python list named "inventory" and wish to display the last value in the list. What Python command could you use?

- A. `print(inventory[-1])`
- B. `print(inventory.end)`
- C. `print(inventory[0])`
- D. `print[inventory.end]`

Answer: A

Explanation: A Python List is an ordered list of comma-separated values enclosed in straight brackets. You can print a specific value from a list using the command `print(name[x])`, where "name" is the name of the list variable, and x is an integer identifying the position of the value in the list. The numbering of the values starts at 0. Therefore, in this example, to print the first value in the list, you could use a command of `print(inventory[0])`. However, you can print the last value in a list with the command `print(inventory[-1])`. Similarly, you can print the next to last value in a list with the command `print(inventory[-2])`.

Video Reference: 6.2.5 Lists

6. Which of the following best describes a Python Dictionary?

- A. An ordered set of name/value pairs enclosed in straight brackets

- B. An unordered set of name/value pairs enclosed in straight brackets
- C. An ordered set of name/value pairs enclosed in curly brackets
- D. An unordered set of name/value pairs enclosed in curly brackets

Answer: D

Explanation: While a Python List is an ordered set of values enclosed in straight brackets, a Python Dictionary is an unordered set of name/value pairs enclosed in curly brackets.

Video Reference: 6.2.6 Dictionaries

7. You're writing a Python script and wish to ask the user the name of the SSID in a wireless network, and you want to assign their response to a variable of ssid. Which command can you use?
- A. `ssid=input("What is the name of the SSID? ")`
 - B. `input=ssid("What is the name of the SSID? ")`
 - C. `ssid=input["What is the name of the SSID? "]`
 - D. `ssid=input(What is the name of the SSID?)`

Answer: A

Explanation: You can use the "input" function to get input from a user running a program. Since "input" is a function, the prompt is enclosed in parenthesis, not straight brackets. Also, since the prompt is a string, it's enclosed in quotes. Therefore, the command `ssid=input("What is the name of the SSID? ")` will prompt the user with the string of "What is the name of the SSID? ". The user's response will then be stored in the variable of ssid.

Video Reference: 6.2.7 User Input

8. Python uses the "if" function to do a Boolean evaluation. What Python function can be used with the "if" function to do a secondary Boolean evaluation if the first evaluation (as specified by the "if" function) is False?
- A. else
 - B. elif
 - C. iff
 - D. elseif

Answer: B

Explanation: When using the "if" function in Python to do a Boolean evaluation. If the result of that evaluation is False, you can take a specific action specified by the "else" function, or you can do a secondary Boolean evaluation using the "elif" function.

Video Reference 6.2.8 The IF Function

9. Which of the following identifies two types of Python Loops?

- A. FOR and NEXT
- B. WHILE and IF
- C. FOR and WHILE
- D. INFINITE and IF

Answer: C

Explanation: Two types of Loops that can be used by Python are FOR and WHILE. A FOR loop will loop for as long as there is a value in a List (or an external file). A WHILE loop will loop while a condition is True.

Video Reference 6.2.9 Loops

10. In a Python script, you wish to open a file named "vlans.txt" in a mode that will let you write additional VLAN values to the file without overwriting the existing values already in the file. Which command could you use?

- A. `file=open("vlans.txt","r")`
- B. `file=open("vlans.txt","rw")`
- C. `file=open("vlans.txt","w")`
- D. `file=open("vlans.txt","a")`

Answer: D

Explanation: The "r" mode opens a file in read-only mode. There is no "rw" mode. The "w" mode opens the file in write mode, which will overwrite any existing values when you write a new value. The "a" mode is the append mode, which will let you add values to a file without overwriting any existing values.

Video Reference 6.2.10 File Access