

Python Interview Questions

The previous materials on the topic can be found at the following links:

- <https://bit.ly/2Yldr02>
- <https://bit.ly/30lfdF7>
- <https://bit.ly/3Hf5W1Q>
- <https://bit.ly/3qL8WNA>

Q1. Name a few libraries in Python used for Data Analysis and Scientific computations.

Answer: NumPy, SciPy, Pandas, SciKit, Matplotlib, Seaborn.

Q2. What does the “self” keyword do?

Answer: The **self** is a Python keyword that represents a variable that holds the instance of an object. In almost all the object-oriented languages, it is passed to the methods as a hidden parameter.

Q3. Which is the standard data missing marker used in Pandas?

Answer: NaN.

Q4. Which Python library would you prefer to use for Data Munging?

Answer: Pandas.

Q5. Which python library is built on top of matplotlib and Pandas to ease data plotting?

Answer: Seaborn.

Q6. What is pylab?

Answer: A package that combines NumPy, SciPy, and Matplotlib into a single namespace.

Q7. Name one of the most commonly used python libraries for Machine Learning?

Answer: SciKit-Learn.

Q8. What does `_init_.py` do?

Answer: `_init_.py` is an empty py file used for importing a module in a directory.

Q9. What is a pass in Python?

Answer: Pass in Python signifies a no operation statement indicating that nothing is to be done.

Q10. How can you check whether a pandas data frame is empty or not?

Answer: The attribute **df.empty** is used to check whether a **data frame** is empty or not.

Q11. How will you reverse a list in Python?

Answer: **list.reverse()**: This function **reverses** objects of list.

Q12. Do we need to declare variables with data types in Python?

Answer: No. Python is a dynamically typed language, which means that Python Interpreter automatically identifies the **data type** of a **variable** based on the type of value assigned to the **variable**.

Q13. Write a command to open the file c:\hello.txt for writing.

Answer: `f = open("hello.txt", "wt")`

Q14. What are the supported data types in Python?

Answer: Python has five standard data types: Numbers, Strings, Lists, Tuples, Dictionaries.

Q15. What is pass in Python?

Answer: **Pass** means, no-operation Python statement, or in other words it is a placeholder in a compound statement, where there should be a blank left and nothing has to be written there.

Q16. What are generators in Python?

Answer: The way of implementing iterators are known as **generators**. It is a normal function except that it yields expression in the function.

Q17. How can you copy an object in Python?

Answer: To copy an object in Python, you can try **copy.copy()** or **copy.deepcopy()** for the general case. You cannot copy all objects but most of them.

Q18. Explain how to delete a file in Python?

Answer: By using a command **os.remove(filename)** or **os.unlink(filename)**.

Q19. What's the process to get the home directory using '~' in Python?

Answer: You need to import the **os module**, and then just a single line would do the rest.

```
import os
print (os.path.expanduser('~'))
```

Q20. Is there a switch or case statement in Python? If not then what is the reason for the same?

Answer: No, Python does not have a **switch** statement, but you can write a **switch** function and then use it.

Q21. What Is %s In Python?

Answer: Python has support for formatting any value into a string. It may contain quite complex expressions. One of the common usages is to push values into a string with the **%s** format specifier. The formatting operation in Python has the comparable syntax as the C function **printf()** has.

Q22. Is it mandatory for a python function to return a value?

Answer: It is not at all necessary for a function to **return** any value. However, if needed, we can use **none** as a return value.

Q23. What is the difference between pass and continue in Python?

Answer: The **continue** statement makes the loop to resume from the next iteration. On the contrary, the **pass** statement instructs to do nothing, and the remainder of the code executes as usual.