Wipro Python Interview Questions

Q1. What Distinguishes a Deep Copy from a Shallow Copy?

Answer:

The child objects of the original object are created by Deepcopy and then added to a new object. As such, modifications made to the original item do not appear in the duplicate.

- **A Deep Copy is produced via copy.deepcopy().**

By creating a new object and populating it with references to the child objects inside the old object, shallow copy creates an alternative object. As such, modifications made to the original item are mirrored in the duplicate.

- **A Shallow Copy is produced by copy.copy.**

Q2. Why Wipro?

Answer: If a query like this is posed, an answer like Wipro is the best IT company in India will be returned. It offers a fantastic workplace. Your attributes will be respected here. The company has operated in several nations and domains. Depending on your professional abilities, you will have a number of options once you are inside. In addition, Wipro offers a strong team environment and a great work-life balance.

Q3. What makes working with Wipro your choice?

Answer: A strong track record of innovation and achievement is why I want to work with Wipro. Since Wipro has been in operation since 1940, I have been impressed with the company. Whenever I consider how technology has

evolved from the 1940s to the present, I know that Wipro could not have succeeded unless it welcomed the change.

Q4. What does Python's docstring mean?

Answer: The first statement in the definition of a function, class, module, or method is called docstring. Additionally, docString offers an improved method for associating the documentation.

Q5. In Python, what are functions?

Answer: Code snippets known as functions are only run when they are invoked. The def keyword in Python is used to define a function.

Q6. How Does Python Achieve Multithreading?

Answer: Generally speaking, multithreading means that several threads are running simultaneously. The Python interpreter can never be held by more than one thread at once thanks to the Python Global Interpreter Lock. Thus, context switching is the method used in Python to accomplish multithreading. Compared to multiprocessing, which essentially opens up many processes across multiple threads, it is very different.

Q7. What is Django Architecture.

Answer: The web service Django is used to create webpages. This is how its architecture looks:

- **Template: the page's main content**
- **Model: data storage system on the back end**
- **View: It communicates with the template and model, mapping them to the URL**
- **Django: provides the user with the page**

Q8. How Can the Content of a Text File Be Shown in Reverse Order?

Answer: The steps below can be used to view a text file's contents in reverse order:

- Use the open() function to open the file.
- Put the file's contents into a list.
- Turn the list's contents around.
- To iterate through the list, run a for loop.

Q9. What is functional or object-oriented programming in Python?

Answer:

The language Python is regarded as multi-paradigm.

Python is an object-oriented programming language.

- **Python enables the construction of objects and the application of certain methods to manipulate them.**
- **It supports the majority of OOPS capabilities, including polymorphism and inheritance.**

The functional programming paradigm is used in Python.

- **Python supports Lambda functions, which are a feature of the functional paradigm, and functions can be utilised as first-class objects.**

Q10. Which are the main characteristics of Python 3.9.0.0?

Answer:

- **Two new modules are graphlib and zoneinfo.**
- **Enhanced modules, including ast and asyncio.**
- **Improved idiom for signal handling, assignment, and Python built-ins are among the optimisations.**
- **Elimination of incorrect procedures and features.**
- **A new parser based on PEG is used in place of LL1.**
- **Prefixes and suffixes can be eliminated using new string methods.**
- **Type-hinted generics in standard collections.**

Q11. How is memory managed in Python?

Answer:

- **Python manages memory through its private heap space.**
- **All Python objects and data structures are stored in a private heap.**
- **The programmer cannot access this private heap. Rather, the Python interpreter handles that.**
- **Additionally, Python has an integrated garbage collector that recycles all leftover memory and releases it into the heap.**
- **It is the responsibility of Python's memory management to allocate heap space for Python objects. Programmers can access certain programming tools using the core API.**

Q12. What advantages do NumPy arrays have over Python lists, even nested ones?

Answer:

- **Python lists are practical general-purpose containers. They are easy to generate and use thanks to Python's list comprehensions, and they enable (relatively) fast insertion, deletion, appending, and concatenation.**
- **Their restrictions include the inability to perform "vectorized" operations like as elementwise addition and multiplication, and the need for Python to keep type information for each element and run type dispatching code while working on it due to their ability to include objects of multiple types.**
- **In addition to having many features including histograms, algebra, linear, basic statistics, quick searching, convolutions, FFTs, and more, NumPy arrays are faster.**

Q13. What are the differences between Pyramid, Django, and Flask.

Answer:

- **Pyramid was made with larger apps in mind. It provides developers with flexibility and lets them use the right tools for the jobs at hand. The developer has access to the database, URL structure, templating style, and other settings. Pyramid is easily adaptable.**

- **A "microframework" for small apps with few requirements is called Flask. In a flask, external libraries are necessary. You can now utilise the flask.**
- **Pyramid and Django can both be utilised for larger applications. It contains an ORM.**

Q14. Which kinds of literals are there in Python?

Answer: In Python source code, a literal denotes a fixed value for primitive data types. The five categories of literals in Python are as follows:

- **String Literal: When you assign text enclosed in single or double quotes to a variable, you create a string literal. To create multiline literals, assign the multiline text enclosed in triple quotes.**
- **Numerical Literal: They could include complex numbers, integers, or floating-point data.Literal**
- **Character: A single character is created by enclosing it in double quotes.**
- **Literal Boolean: True or False**
- **Literal Collections: List collections, tuple literals, dictionary literals, and set literals are the four different categories of literals.**

Q15. Tell the difference between xrange and range.

Answer: Range and xrange are nearly identical in terms of functionality. The ability to generate a list of numbers for any purpose is something they both offer. Range creates a Python list object, whereas x range returns an xrange object. This is the only distinction between range and xrange. Range will use all available memory to build your array of numbers, which could result in a memory problem and crash your programme. This is particularly true if you are working with a system that needs a lot of memory, like a phone. It is a beast that suffers from memory loss.