**1. What are the benefits of using Python language as a tool in the present scenario?**

Following are the benefits of using Python language:

* Object-Oriented Language
* High Level Language
* Dynamically Typed language
* Extensive support Libraries

**2.Which sorting technique is used by sort() and sorted() functions of python?**

Python uses [Tim Sort](https://www.geeksforgeeks.org/timsort/) algorithm for sorting. It’s a stable sorting whose worst case is O(N log N). It’s a hybrid sorting algorithm, derived from merge sort and insertion sort, designed to perform well on many kinds of real-world data

**3. What is PEP 8?**

PEP 8 is a Python style guide. It is a document that provides the guidelines and best practices on how to write beautiful Python code. It promotes a very readable and eye-pleasing coding style.

**4. How to delete a file using Python?**

We can delete a file using Python by following approaches:

* os.remove()
* os.unlink()

**5. What are Decorators?**

Decorators are a very powerful and useful tool in Python as they are the specific change that we make in Python syntax to alter functions easily.

**6. How do you debug a Python program?**

By using this command we can debug a python program:

$ python -m pdb python-script.py

**7. Does Python supports multiple Inheritance?**

Python does support multiple inheritance, unlike Java. Multiple inheritance means that a class can be derived from more than one parent classes.

**8. Define encapsulation in Python?**

Encapsulation means binding the code and the data together. A Python class is an example of encapsulation.

**9.How do you do data abstraction in Python?**

Data Abstraction is providing only the required details and hiding the implementation from the world. It can be achieved in Python by using interfaces and abstract classes.

**10. What does ‘#’ symbol do in Python?**

‘#’ is used to comment out everything that comes after on the line.

**11. What is the maximum possible length of an identifier?**

Identifiers in Python can be of any length.

**12.What is PIP?**

**13. What is the difference between a shallow copy and deep copy?**

**14. What is swapcase function in Python?**

**15. What is a lambda function?**

**16. How memory management is done in Python?**

**17. Is Python a compiled language or an interpreted language? 18. What is Pickling and Unpickling? 19. What is List Comprehension? Give an Example.**

List comprehension is a syntax construction to ease the creation of a list based on existing iterable.

For Example:

my\_list = [i for i in range(1, 10)]

**20. Is Tuple Comprehension? If yes, how and if not why?**

(i for i in (1, 2, 3))

Tuple comprehension is not possible in Python because it will end up in a generator, not a tuple comprehension.