Q1. What is the purpose of Python's OOP?

**Ans:**object-oriented Programming (OOPs) is a programming paradigm that uses objects and classes in programming. It aims to implement real-world entities like inheritance, polymorphisms, encapsulation, etc. in the programming.

Q2. Where does an inheritance search look for an attribute?

**Ans:** All of these objects are namespaces (packages of variables), and the inheritance search is simply a search of the tree from bottom to top looking for the lowest occurrence of an attribute name.

Q3. How do you distinguish between a class object and an instance object?

**Ans: Class** **object** : Everything in Python is an object such as integers, lists, dictionaries, functions and so on. Every object has a type and the object types are created using classes.

**Instance** **object** : Instance is an object that belongs to a class. For instance, list is a class in Python.

Q4. What makes the first argument in a class’s method function special?

**Ans:** The first argument of every class method, including init, is always a reference to the current instance of the class.

Q5. What is the purpose of the \_\_init\_\_ method?

**Ans:** The \_\_init\_\_ method lets the class initialize the object's attributes and serves no other purpose. It is only used within classes.

Q6. What is the process for creating a class instance?

**Ans:** To create instances of a class, you call the class using class name and pass in whatever arguments its \_\_init\_\_ method accepts.

Q7. What is the process for creating a class?

**Ans:** To create a class, use the keyword class follwed by the class name.

Q8. How would you define the superclasses of a class?

**Ans:** A superclass is the class from which many subclasses can be created. The subclasses inherit the characteristics of a superclass. The superclass is also known as the parent class or base class.