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

Answer: python’s OOP provides a means of structuring programs so that properties and behaviors are bundled into individual objects.

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

Answer: An inheritance search looks for an attribute first in the instance object, then in the class the instance was created from, then in all higher superclasses, progressing from left to right (by default). The search stops at the first place the attribute is found.

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

Answer: Every object has a type and the object types are created using classes.while Instance is an object that belongs to a class. For instance, list is a class in Python. When we create a list, we have an instance of the list class.

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

Answer: The calling process is automatic while the receiving process is not (its explicit). This is the reason the first parameter of a function in class must be the object itself. Writing this parameter as self is merely a convention.

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

Answer: 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?

Answer: 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?

Answer: A class can be created by using the keyword class, followed by the class name.

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

Answer: A class that is derived from another class is called a subclass (also a derived class, extended class, or child class). The class from which the subclass is derived is called a superclass (also a base class or a parent class).