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

Python's OOP (Object-Oriented Programming) help us to organize code into reusable objects with all properties and functions, making it easier to manage and create complex programs.

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

In inheritance, Python checks for an attribute in the current object first and then looks in its parent classes, following a fixed order to determine which parent class to check first.

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

A class object is like a plan, and an instance object is like something made from that plan. The instance object represents a specific thing created based on the class.

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

The first argument in a class method function, is self, which refers to the instance of the class itself. It help method to access and manipulate the object's properties and function.

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

The purpose of the \_\_init\_\_ method is to initialize the state of an object when it is created from a class. It allows us to define and assign values to the object's properties.

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

To create a class instance, first define the class, call its constructor with arguments if needed, and assign the result to a variable.

Q7. What is the process for creating a class?

To create a class, use class followed by the class name, define properties and methods inside , include a constructor method \_\_init\_\_ to initialize the object's state, and the create instances by calling the class name with parentheses.

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

To define the superclasses of a class ,weneed to specify them in parentheses after the class name, separated with commas, to establishes the inheritance relationship, allow the class to inherit properties and function from its superclasses.