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

1. The purpose of OOP is to used tostructurea software program into simple, reusable pieces of code blueprints (usually called classes), which are used to create individual instances of objects.

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

1. Inheritence in Python searches the namespace tree for an attribute

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

1. If the value of a variable varies from object to object, then such variables are called instance variables.

A class variable is a variable that is declared inside of class, but outside of any instance method or \_\_init\_\_() method.

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

1. meth(args) becomes Class This is the reason the first parameter of a function in class **must be the object itself**..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?

1. The \_\_init\_\_  function is called every time an object is created from a class. The \_\_init\_\_ method lets the class initialize the object’s attributes. It is only used within classes.

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

1. When you **create an object**, you are creating an instance of a class, therefore "instantiating" a class. The new operator requires a single, postfix argument: a call to a constructor. The name of the constructor provides the name of the class to instantiate. The constructor initializes the new object.

Q7. What is the process for creating a class?

1. In Python, 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?

A) 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.