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

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. The main concept of OOPs is to bind the data and the functions that work on that together as a single unit so that no other part of the code can access this data.

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

Every time you use an expression of the form object. attr where object is an instance or class object, Python searches the namespace tree at and above object , for the first attr it can find. Because lower definitions in the tree override higher ones, inheritance forms the basis of specialization.

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

An instance is also the physical manifestation of a class that occupies memory and has data members. The difference between the two is that an object represents a set of instances while an instance is a certain, specific representation.

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

Classes provide a means of bundling data and functionality together. Creating a new class creates a new type of object, allowing new instances of that type to be made. Each class instance can have attributes attached to it for maintaining its state. Class instances can

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

modern programming language, Python provides all the means to implement the object-oriented philosophy. The \_\_init\_\_ method is at the core of OOP

The task of constructors is to initialize(assign values) to the data members of the class when an object of class is created. Like methods, a constructor also contains collection of statements(i.e. instructions) that are executed at time of Object creation. It is run as soon as an object of a class is instantiated. The method is useful to do any initialization you want to do with your object.

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

The process of creating an object is called Instantiation.

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?

To create a class, use the keyword class:

class MyClass:

x = 5

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

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.

In the above example, Vehicle is the Superclass and its subclasses are Car, Truck and Motorcycle.