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

Ans: In Python, 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: The whole point of a namespace tool like the class statement is to support name inheritance. In Python, inheritance happens when an object is qualified, and involves searching an attribute definition tree (one or more namespaces). 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?

Ans: A class is a template for creating objects in a program, whereas the object is an instance of a class. A class is a logical entity, while an object is a physical entity. A class does not allocate memory space; on the other hand, an object allocates memory space

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

Ans: self represents the instance of the class. By using the "self" we can access the attributes and methods of the class in python. It binds the attributes with the given arguments.

Q5. What is the purpose of the __init__ method?

Ans: It's the way that we can define the initialization behavior of an object. However, when I call x = SomeClass() , __init__ is not the first thing to get called.

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

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

Ans: The class from which a class inherits is called the parent or superclass.