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

It prepares the object-oriented programming in python. Creating class and for each object which is combination of attributes and methods simplify the process of troubleshooting. Also inheriting, encapsulation and many other concepts with OOP programming, help the code be reusable, easy understandable.

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

Python upwards from instance to the all superclass then firstly, it will search in the instance object, then in the class the instance was created from, and finally it will search all the higher super classes. In each level of this tree of attributes, it will move from left to right by default and will stop when the first attribute is found.

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

The class object is the class and can have attributes and methods which are shared between all its instances. But instance object is a specific instance of the class and have own attributes and methods which are independent.

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

It is “self” and is a class object, and when an instance object call an instance method, the instance object send to the class as ‘self which is first argument of all methods in a class.

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

It is a kind of class instructor, which initializes the attributes of the class when we define an instance of a class.

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

By creating instance, we make an instance object of that class, which run \_\_init\_\_ method and initializes all the attributes of the class for that instance, we can call methods of the class by this instance and in simple words, it is a class type variable.

Q7. What is the process for creating a class?

We can use class keywords which will follow with the name of the class (it can be any name) after that if our class has any attributes or methods, we have to define them one by one.

Q8. How would you define the super classes of a class?

A class that other classes will inherit from it is a super class. It can create same as a simple class with the class keyword and a name after it, if other classes start to inherit from it and use its attributes and methods, this simple class will call super class.