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

It’s an object oriented programming paradigm which will help to build the real time application and enable the entities such as encapsulation, abstraction, inheritance, polymorthism.

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

It will try to search for an attribute from bottom-up approach. Like it will try find in the base class then if not then super class and then upper super class and so on in the package.

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

Class objects are the one which are initialized with the method or with the init method and also occupying the memory. Whereas the instance object is a reference to the class object which still not yet initialized.

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

Its passing the first argument as self means its referring to the object that calling the method.

While defining any method in a class we need to define the self as a default keyword as a first argument.

Even if we don’t pass anything still function will get executed.

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

This method is just like a constructor which will be used to construct an object and will used to initialize the object members.

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

First we’ll take a new object reference as below and then assign the same with class name along with the parentheses as below:

P = pillow()

Here P is an object of a class pillow. Here while creating a class its calling a init constructor and will construct an object.

Also after the execution the memory location has been assigned to an object P.

With this object we can access the attribute of the class pillow.

Q7. What is the process for creating a class?

Below is an example of creating a class where we’ve created a class with no attributes.

For defining class we need to use the class keyword and the classname and the class-body as per the requirement.

class pillow:

pass

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

class A:

pass

class D:

pass

class B(A,D):

pass

Here from above we can see that class B are having the superclasses A and D. Which means class B is a base class which is trying to derive the features of the class A and class D superclasses.