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

* Object-oriented programming id used for structuring programs so that properties and behaviors are bundled into individual **objects**.
* To improve code readability and reusability by defining a Java program efficiently

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

* Inheritance will find the first occurrence of attribute by looking in object, then in all classes above it, from bottom to top and left to right.

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

* We can use isinstance() method to identify if instance belongs to that class or not

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

* Usually self is passed as the first argument in method so that method has accessibility to the calling object so that it can perform operations.

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

* The \_\_init\_\_ method is similar to **constructors**in C++ and Java. Constructors are used to initialize the object’s state. The task of constructors is to initialize (assign values) to the data members of the class when an object of class is created

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

* 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:
* All classes have a function called \_\_init\_\_(), which is always executed when the class is being initiated.
* Use the \_\_init\_\_() function to assign values to object properties, or other operations that are necessary to do when the object is being created.
* Classes can also contain methods. Methods in objects are functions that belong to the object. Use keyword def.

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

* The class whose subclass has been made is called a superclass. Other names of superclass are base class or parent class, and other names of subclass are derived class or child class.
* All the attributes and methods of superclass are inherited by its subclass also. This means that an object of a subclass can access all the attributes and methods of the superclass. Moreover, subclass may have its own attributes or methods in addition to the inherited ones as well.