**1. What is the concept of an abstract superclass?**

- An abstract class can be considered as a blueprint for other classes. It allows you to create a set of methods that must be created within any child classes built from the abstract class. A class which contains one or more abstract methods is called an abstract class.

**2. What happens when a class statement's top level contains a basic assignment statement?**

**-**This type of statement lets you create, initialize, and update variables throughout your code. Variables are a fundamental cornerstone in every piece of code, and assignment statements give you complete control over variable creation and mutation

**3. Why does a class need to manually call a superclass's \_\_init\_\_ method?**

- It's because one needs to define something that is NOT done in the base-class' \_\_init\_\_ , and the only possibility to obtain that is to put its execution in a derived-class' \_\_init\_\_ function.

**4. How can you augment, instead of completely replacing, an inherited method?**

A more sophisticated way to augment an inherited method involves forwarding. Message forwarding allows you to augment an inherited method in such a way that it can perform its inherited action and some new action.

**5. How is the local scope of a class different from that of a function?**

-Another is the Local Scope, variables declared inside the functions are considered to be of the local scope and it is further divided into function scoped and block scoped. Function Scope: When a variable is declared inside a function, it is only accessible within that function and cannot be used outside that function.