Q1. What is the difference between \_\_getattr\_\_ and \_\_getattribute\_\_?

\_\_getattr\_\_ is more commonly used for handling attribute access when an attribute is not found, while \_\_getattribute\_\_ is used in more advanced scenarios where full control over attribute access is required.

Q2. What is the difference between properties and descriptors?

properties provide a simpler and more high-level approach to customizing attribute access and modification, while descriptors offer more flexibility and control but require a deeper understanding of the underlying descriptor protocol. The choice between properties and descriptors depends on the specific requirements and complexity of the attribute behavior you want to implement.

Q3. What are the key differences in functionality between \_\_getattr\_\_ and \_\_getattribute\_\_, as well as properties and descriptors?

\_\_getattr\_\_ and \_\_getattribute\_\_ are methods that handle attribute access and provide different levels of customization. Properties and descriptors, on the other hand, are higher-level mechanisms that allow you to define custom behavior for attribute access and modification in a more declarative manner.