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

**Ans:** A key difference between \_\_getattr\_\_ and \_\_getattribute\_\_ is that \_\_getattr\_\_ is only invoked if the attribute was not found the usual ways. \_\_getattribute\_\_ is invoked before looking at the actual attributes on the object, and so can be tricky to implement correctly. You can end up in infinite recursions very easily.

Q2. What is the difference between properties and descriptors?

**Ans:** Descriptors are a low-level mechanism that lets you hook into an object's attributes being accessed. Properties are a high-level application of this; that is, properties are implemented using descriptors.

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

**Ans:** A key difference between \_\_getattr\_\_ and \_\_getattribute\_\_ is that \_\_getattr\_\_ is only invoked if the attribute was not found the usual ways. It's good for implementing a fallback for missing attributes and is probably the one of two you want.