1.

getattribute: Is used to retrieve an attribute from an instance. getattr: Is executed as the last resource when attribute is not found in an object.

2.

Python's property() is the Pythonic way to avoid formal getter and setter methods in your code. This function allows you to turn class attributes into properties or managed attributes. Since property() is a built-in function, you can use it without importing anything.

Python descriptors are created to manage the attributes of different classes which use the object as reference.

3.

getattribute: Is used to retrieve an attribute from an instance. getattr: Is executed as the last resource when attribute is not found in an object.

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.