characteristics of oop in python

- Classes and Objects: Define and create entities with attributes and methods.
- Encapsulation: Bundles data and methods, hides internal state.
- Inheritance: Allows a class to inherit from another, promoting reuse and hierarchy.
- **Polymorphism:** Enables methods to operate differently based on the object's type.
- **Abstraction:** Hides complex details, exposing only necessary features.