## Task 1: Types of Inheritance in Python:

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## Task 2: Scenario

Build an e-commerce system where users can browse products, add them to a shopping cart, and check out.

## Requirements

* Encapsulation: Product price and stock are private.
* Inheritance: Base class Product; subclasses like Electronics, Clothing, and Grocery.
* Polymorphism: Override the get\_discounted\_price() method in each subclass.
* Abstraction: Shopping cart operations (add, remove, checkout) are abstracted in a Cart class.
* Composition: Cart contains multiple Product objects.
* Testing: Simulate a user session by adding products, removing them, checking out, and printing the receipt.

Example Classes:

* Product (base)
* Electronics, Clothing, Grocery (subclasses)
* Cart (manages products)