1. **Class Hierarchy:**
   - Define a base class `Product` that contains common attributes and methods for all types of products, such as `id`, `name`, `price`, `quantity`, etc.
   - Create subclasses for specific types of products, such as `ElectronicsProduct`, `ClothingProduct`, and `GroceryProduct`.
2. **Attributes and Methods:**
   - Each subclass should have additional attributes and methods specific to the type of product it represents.
   - For example, an `ElectronicsProduct` subclass might have attributes such as `brand` and `warrantyPeriod`, while a `GroceryProduct` subclass might have attributes such as `expirationDate` and `storageTemperature`.
3. **Method Overriding:**
   - Find out three methods to override from the base class and implement these
4. **Inventory Management:**
   - Implement methods to add products to the inventory, remove products from the inventory, and update product information.
   - Ensure that the system can efficiently search for products based on various criteria such as name, brand, category, etc.