



Inventory Management System for a Retail Store

Description:

Develop an inventory management system for a retail store that allows the store manager to keep track of products, monitor stock levels, and generate reports. The system will use lists, dictionaries, and tuples to store and manage inventory data, and it will implement looping and conditional statements to handle various operations.

Key Features:

1. Add New Products:

- Allow the manager to add new products to the inventory.
- Each product will be represented as a tuple containing details like product ID, name, category, price, and stock quantity.

2. Update Stock Levels:

- Allow the manager to update the stock levels of existing products.
- Use a dictionary where the product ID is the key, and the value is a tuple with product details.



3. View Products by Category:

- Allow the manager to view a list of products filtered by category.
- Use lists to store and display products within a specified category.

4. Generate Low Stock Report:

- Generate a report of products that are low in stock (below a certain threshold).
- Use conditionals to check stock levels and loops to iterate through the inventory.

5. Search for Products:

- Allow the manager to search for products by name or ID.
- Implement search functionality using loops and conditionals to find matching products.