

1. Inventory Management Consolidation

Scenario:

Consolidate inventory data from multiple warehouses, clean it, and calculate stock levels per product.

Datasets:

Warehouse 1 (warehouse1_inventory.csv):

ProductID	ProductName	Stock	Warehouse
101	Laptop	50	Warehouse 1
102	Mouse	150	Warehouse 1
103	Keyboard	75	Warehouse 1

Warehouse 2 (warehouse2_inventory.csv):

ProductID	ProductName	Stock	Warehouse
101	Laptop	30	Warehouse 2
102	Mouse	200	Warehouse 2
104	Monitor	100	Warehouse 2

Output:

ProductID	ProductName	TotalStock
101	Laptop	80
102	Mouse	350
103	Keyboard	75
104	Monitor	100

Files:

- warehouse1_inventory.csv
- warehouse2_inventory.csv
- warehouse3_inventory.csv

Activities:

1. Read inventory data from all warehouses.
2. Merge the datasets.
3. Clean the data (e.g., handle missing values or invalid product IDs).
4. Aggregate stock levels by product.