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In [5]: import pandas as pd

In [6]: import matplotlib.pyplot as plt

In [ ]: #Loading Data

In [6]: import matplotlib.pyplot as plt

In [7]: customers = pd.read_csv("Customers.csv")

In [8]: products = pd.read_csv("Products.csv")

In [9]: transactions = pd.read_csv("Transactions.csv")

In [10]: #Merging Transition with Product information

In [11]: transactions = transactions.merge(products, on="ProductID")

In [12]: # Basic EDA

In [13]: print("Missing Values:")

Missing Values:

In [14]: print(customers.isnull().sum())

CustomerID      0
CustomerName    0
Region          0
SignupDate      0
dtype: int64

In [15]: print(transactions.isnull().sum())

TransactionID    0
CustomerID       0
ProductID        0
TransactionDate  0
Quantity         0
TotalValue       0
Price_x          0
ProductName      0
Category         0
Price_y          0
dtype: int64

In [16]: # Example Visualization: Sales by Region

In [18]: sales_by_region = transactions.merge(customers, on="CustomerID") \
        .groupby("Region")["TotalValue"].sum().sort_values()
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In [21]: sales_by_region.plot(kind="bar", title="Total Sales by Region")  
plt.show()
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