```
import pandas as pd
import matplotlib.pyplot as plt
```

```
data = pd.read_csv("/content/commercial_store_dataset.csv")
data.head()
```

	Transaction ID	Date	Customer ID	Product ID	Product Name	Category	Quantity Sold	Unit Price	Total Sale Amount	Payment Method	Store Location
0	T001	2024-12-01	C101	P001	LED TV 42"	Electronics	1	35000	35000	Credit Card	Mumbai
1	T002	2024-12-01	C102	P005	Coffee Maker	Home Appliance	2	3000	6000	Cash	Delhi
2	T003	2024-12-02	C103	P007	Leather Wallet	Accessories	3	500	1500	Debit Card	Bengaluru
3	T004	2024-12-03	C101	P002	Smartphone	Electronics	1	15000	15000	Credit Card	Mumbai
4	T005	2024-12-04	C104	P003	Air Conditioner	Home Appliance	1	40000	40000	UPI	Hyderabad

Next steps: Generate code with `data` | View recommended plots | New interactive sheet

```
# Load data into a DataFrame
df = pd.DataFrame(data)

# 1. Calculate total sales revenue
total_revenue = df["Total Sale Amount"].sum()
print(f"Total Sales Revenue: ₹{total_revenue}")
```

```
Total Sales Revenue: ₹102500
```

```
# 2. Top-selling categories by revenue
category_revenue = df.groupby("Category")["Total Sale Amount"].sum().sort_values(ascending=False)
```

```
print("\nTop-Selling Categories:\n", category_revenue)
```

```
Top-Selling Categories:
 Category
Electronics       50000
Home Appliance    46000
Footwear           5000
Accessories        1500
Name: Total Sale Amount, dtype: int64
```

```
# 3. Top payment method by usage
payment_method_usage = df["Payment Method"].value_counts()
print("\nPayment Method Usage:\n", payment_method_usage)
```

```
Payment Method Usage:
 Payment Method
Credit Card    2
Cash           2
Debit Card     1
UPI            1
Name: count, dtype: int64
```

```
# 4. Store with the highest sales
store_revenue = df.groupby("Store Location")["Total Sale Amount"].sum().sort_values(ascending=False)
print("\nSales by Store Location:\n", store_revenue)
```

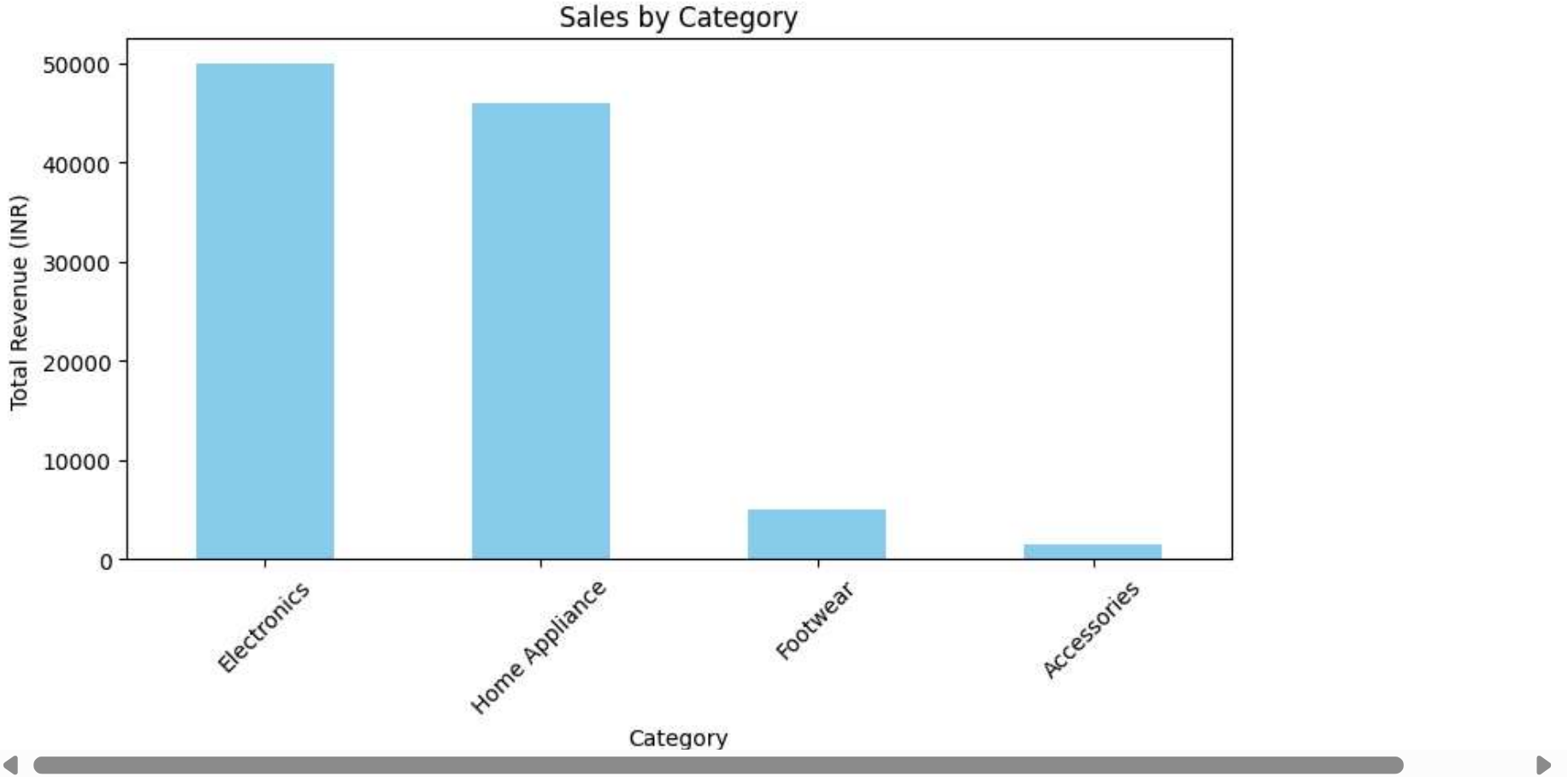
```
Sales by Store Location:
 Store Location
Mumbai       50000
Hyderabad    40000
Delhi         6000
Chennai       5000
Bengaluru     1500
Name: Total Sale Amount, dtype: int64
```

```
# 5. Top customer by purchase amount
customer_revenue = df.groupby("Customer ID")["Total Sale Amount"].sum().sort_values(ascending=False)
```

```
print("\nTop Customers:\n", customer_revenue)
```

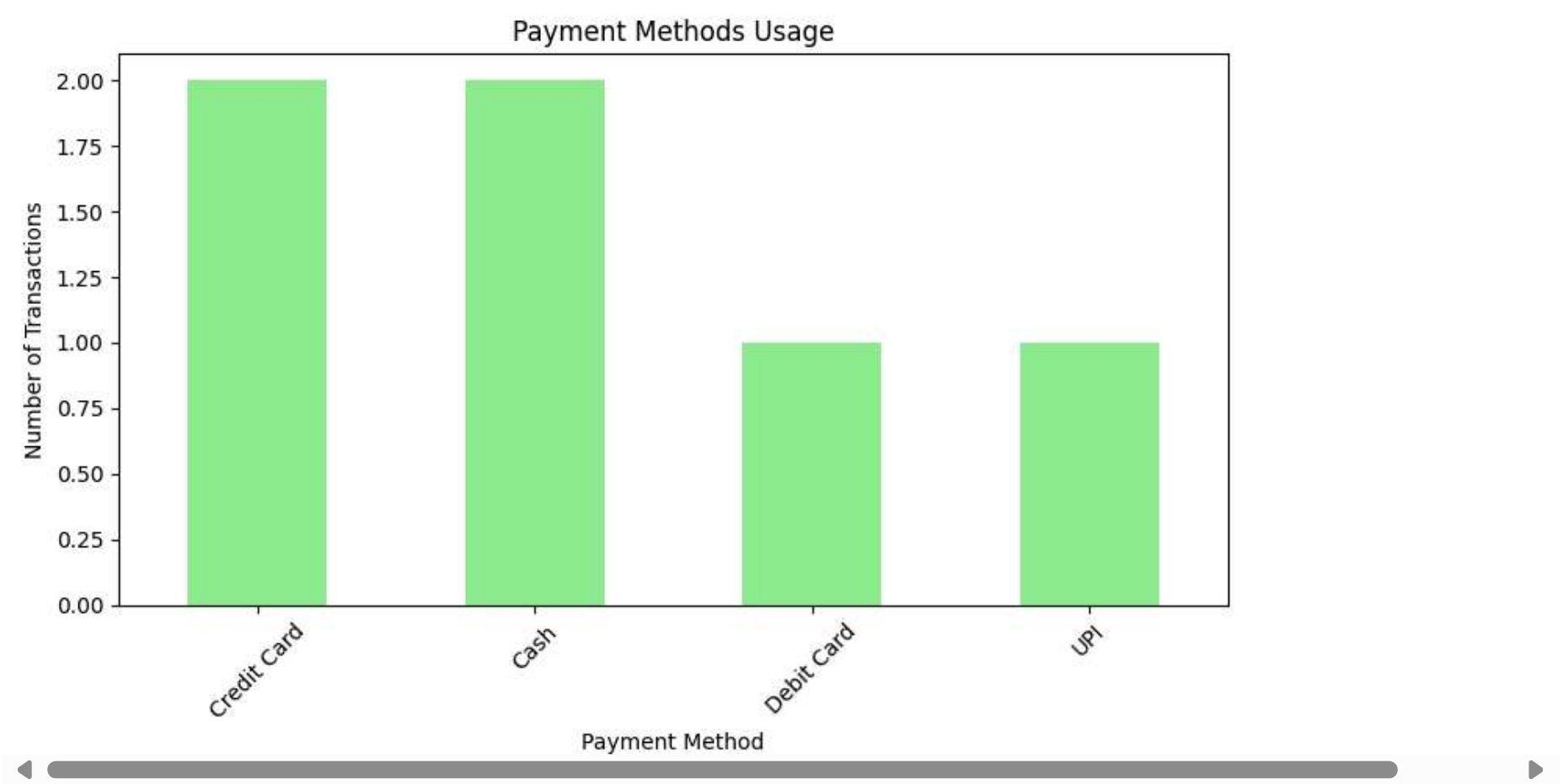
```
Top Customers:
 Customer ID
C101    50000
C104    40000
C102     6000
C105     5000
C103     1500
Name: Total Sale Amount, dtype: int64
```

```
# Plot: Sales by Category
plt.figure(figsize=(8, 5))
category_revenue.plot(kind='bar', color='skyblue')
plt.title("Sales by Category")
plt.ylabel("Total Revenue (INR)")
plt.xlabel("Category")
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```




```
# Plot: Sales Distribution by Location
plt.figure(figsize=(8, 5))
store_revenue.plot(kind='pie', autopct='%1.1f%%', startangle=90, colors=["#ff9999", "#66b3ff", "#99ff99", "#ffcc99"])
plt.title("Sales Distribution by Store Location")
plt.ylabel("")
plt.tight_layout()
plt.show()
```


```
# Plot: Payment Methods Usage
plt.figure(figsize=(8, 5))
payment_method_usage.plot(kind='bar', color='lightgreen')
plt.title("Payment Methods Usage")
plt.ylabel("Number of Transactions")
plt.xlabel("Payment Method")
plt.xticks(rotation=45)
plt.tight_layout()
plt.show()
```




```
# Plot: Sales Trends Over Time
sales_by_date = df.groupby("Date")["Total Sale Amount"].sum()
plt.figure(figsize=(8, 5))
sales_by_date.plot(kind='line', marker='o', color='purple')
plt.title("Sales Trends Over Time")
plt.ylabel("Total Revenue (INR)")
plt.xlabel("Date")
plt.grid()
plt.tight_layout()
plt.show()
```


Sales Trends Over Time
40000
30000
20000
l Revenue (INR)