

```

import pandas as pd

import matplotlib.pyplot as plt

file_path = 'retail_sales_dataset.csv'

df = pd.read_csv(file_path)

print("Dataset Columns:", df.columns)

# Instead of 'Region', use 'Product Category'
sales_by_category = df.groupby('Product Category')['Total Amount'].sum().reset_index()

print("\nTotal Sales by Product Category:")

print(sales_by_category)

# Bar Plot
plt.figure(figsize=(8,5))

plt.bar(sales_by_category['Product Category'], sales_by_category['Total Amount'], color='skyblue')

plt.title("Total Sales by Product Category")

plt.ylabel("Sales Amount")

plt.xlabel("Product Category")

plt.show()

# Top Performing Category
top_category = sales_by_category.loc[sales_by_category['Total Amount'].idxmax()]

print("\nTop Performing Category:", top_category['Product Category'],

      "with sales =", top_category['Total Amount'])

# Group by Gender + Product Category
gender_category_sales = df.groupby(['Gender', 'Product Category'])['Total Amount'].sum().unstack(fill_value=0)

print("\nSales by Gender and Product Category:")

print(gender_category_sales)

```

```
# Stacked Bar Plot
```

```
gender_category_sales.plot(kind='bar', stacked=True, figsize=(8,5))
```

```
plt.title("Stacked Sales by Gender and Product Category")
```

```
plt.ylabel("Sales Amount")
```

```
plt.xlabel("Gender")
```

```
plt.show()
```

```
# Grouped Bar Plot
```

```
gender_category_sales.plot(kind='bar', stacked=False, figsize=(8,5))
```

```
plt.title("Grouped Sales by Gender and Product Category")
```

```
plt.ylabel("Sales Amount")
```

```
plt.xlabel("Gender")
```

```
plt.show()
```

Output:-



