```python
import matplotlib.pyplot as plt

print(os.getcwd())  # to check current directory

# Load the CSV file (make sure it's in the same folder)
df = pd.read_csv('sales_data.csv')

# Display first few rows
print(df.head())

# Basic info
print(df.info())
print(df.describe())

# Check missing values
print(df.isnull().sum())

# Grouping & Summarizing
sales_by_product = df.groupby('Product')['Sales'].sum().reset_index()
print(sales_by_product)

sales_by_region = df.groupby('Region')['Sales'].sum().reset_index()
print(sales_by_region)

# Date column and monthly sales
df['Date'] = pd.to_datetime(df['Date'])
df['Month'] = df['Date'].dt.to_period('M')
monthly_sales = df.groupby('Month')['Sales'].sum().reset_index()
print(monthly_sales)

# Charts
plt.figure(figsize=(8,5))
plt.bar(sales_by_product['Product'], sales_by_product['Sales'])
plt.title('Total Sales by Product')
plt.xlabel('Product')
plt.ylabel('Sales')
plt.show()

plt.figure(figsize=(8,5))
plt.bar(sales_by_region['Region'], sales_by_region['Sales'], color='orange')
plt.title('Sales by Region')
plt.xlabel('Region')
plt.ylabel('Sales')
plt.show()

plt.figure(figsize=(10,5))
plt.plot(monthly_sales['Month'].astype(str), monthly_sales['Sales'], marker='o')
plt.title('Monthly Sales Trend')
plt.xlabel('Month')
plt.ylabel('Sales')
plt.grid(True)
plt.show()
```

IDLE Shell 3.13.2

File Edit Shell Debug Options Window Help

```
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================== RESTART: E:/intership codes/sales_analysis.py ================
E:\intership codes
         Date    Product Region  Sales
0  31-01-2025  Product A  North   1200
1  28-02-2025  Product B  South    800
2  31-03-2025  Product C   East    950
3  30-04-2025  Product A   West    400
4  31-05-2025  Product B  North   1500
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 12 entries, 0 to 11
Data columns (total 4 columns):
 #   Column   Non-Null Count  Dtype
---  ------   --------------  -----
 0   Date     12 non-null     object
 1   Product  12 non-null     object
 2   Region   12 non-null     object
 3   Sales    12 non-null     int64
dtypes: int64(1), object(3)
memory usage: 516.0+ bytes
None
             Sales
count    12.000000
mean    912.500000
std     331.748125
min     400.000000
25%     675.000000
50%     925.000000
75%    1125.000000
max    1500.000000
Date       0
Product    0
Region     0
Sales      0
dtype: int64
     Product  Sales
0  Product A   3200
1  Product B   3900
2  Product C   3850
```

Ln: 65 Col: 0

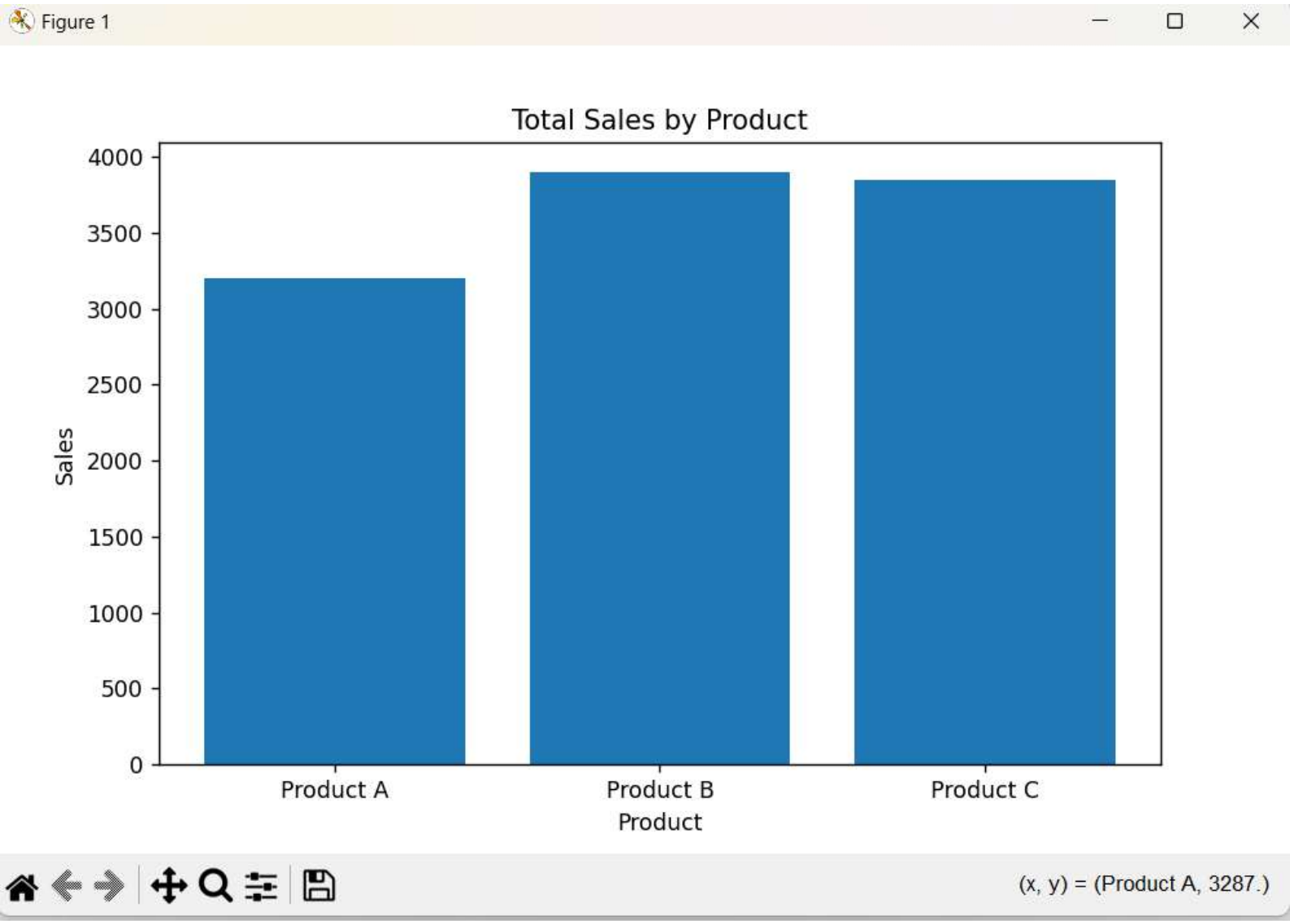
Figure 1
Total Sales by Product
4000
3500
3000
2500
2000
1500
1000
500
0
Sales
Product A
Product B
Product C
Product
(x, y) = (Product A, 3287.)