

Data Analysis and Visualization with Python

Dataset Overview

For this demonstration, we'll use a sample dataset of sales data. Let's load the data and take a look at the first few rows.

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

# Sample sales data
data = {
    'Month': ['Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun'],
    'Sales': [200, 220, 250, 275, 300, 320]
}

# Create a DataFrame
df = pd.DataFrame(data)

# Display the data
df
```

	Month	Sales
0	Jan	200
1	Feb	220
2	Mar	250
3	Apr	275
4	May	300
5	Jun	320

Data Analysis

Let's perform a simple analysis to find the total sales.

```
# Calculate total sales
total_sales = df['Sales'].sum()

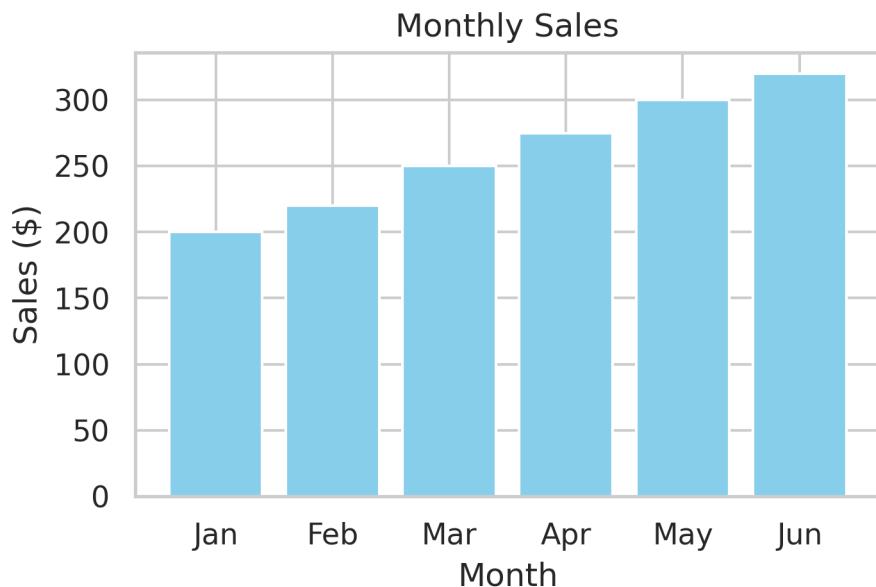
# Display the result
print(f"Total Sales: ${total_sales}")
```

Total Sales: \$1565

Data Visualization

Now, let's create a bar chart to visualize the sales data for each month.

```
# Create a bar plot
plt.figure(figsize=(5, 3), dpi=300)
plt.bar(df['Month'], df['Sales'], color='skyblue')
plt.xlabel('Month')
plt.ylabel('Sales ($)')
plt.title('Monthly Sales')
plt.show()
```



Conclusion

This notebook demonstrated a simple data analysis and visualization using Python. With just a few lines of code, we were able to load data, calculate total sales, and create a bar chart.