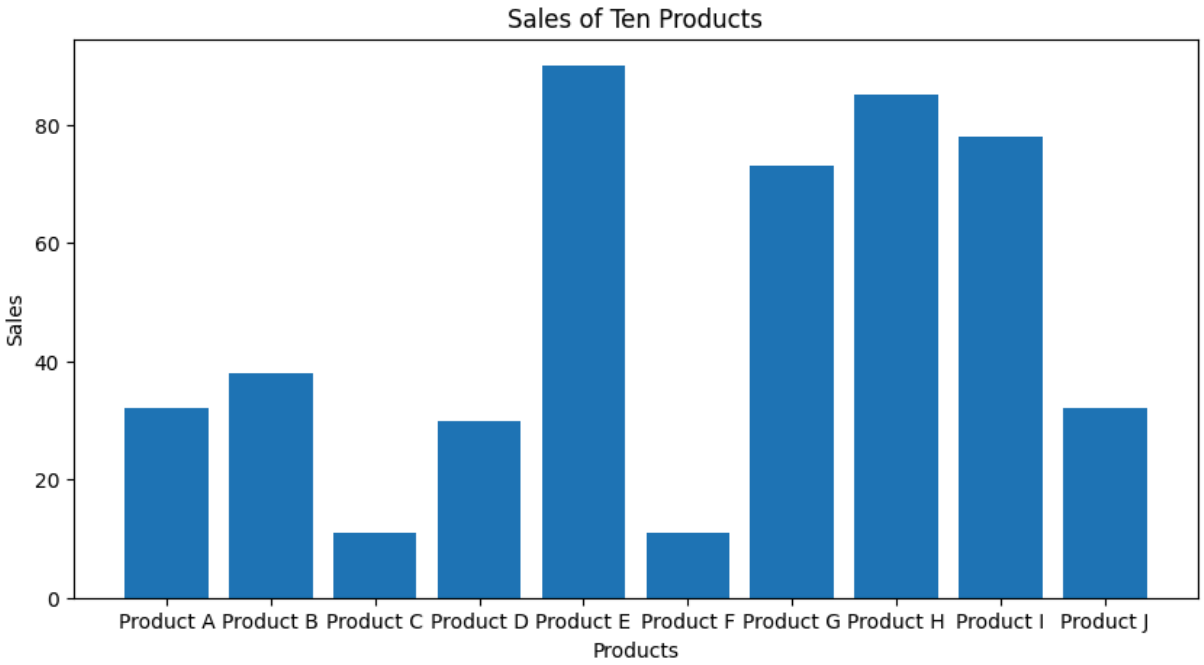
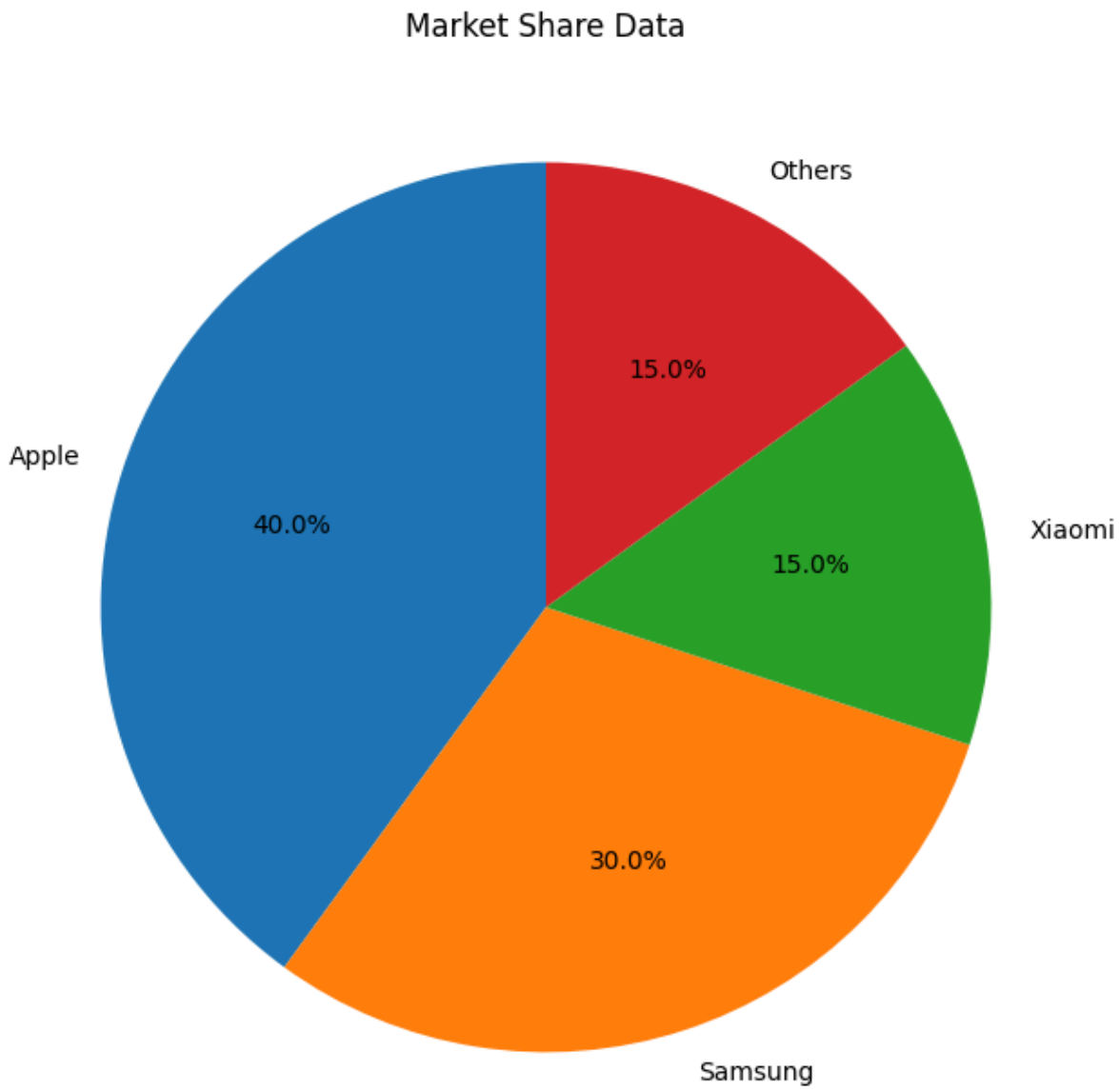
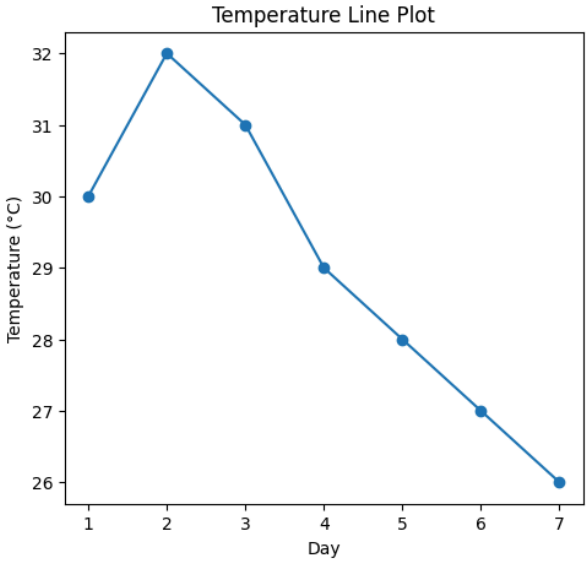
In [7]:
```
import matplotlib.pyplot as plt
import numpy as np

# 1. Bar chart for sales of ten products
products = ['Product A', 'Product B', 'Product C', 'Product D', 'Product E',
            'Product F', 'Product G', 'Product H', 'Product I', 'Product J']
sales = np.random.randint(10, 100, 10) # Generate random sales data
plt.figure(figsize=(10, 5))
plt.bar(products, sales)
plt.title('Sales of Ten Products')
plt.xlabel('Products')
plt.ylabel('Sales')
plt.show()
```

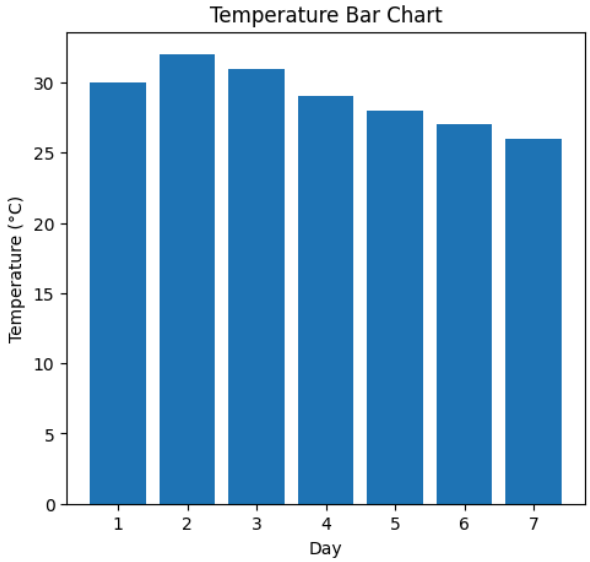


In [2]:
```
# 2. Pie chart for market share data
market_share = {'Apple': 40, 'Samsung': 30, 'Xiaomi': 15, 'Others': 15}
labels = market_share.keys()
sizes = market_share.values()
plt.figure(figsize=(8, 8))
plt.pie(sizes, labels=labels, autopct='%1.1f%%', startangle=90)
plt.title('Market Share Data')
plt.show()
```

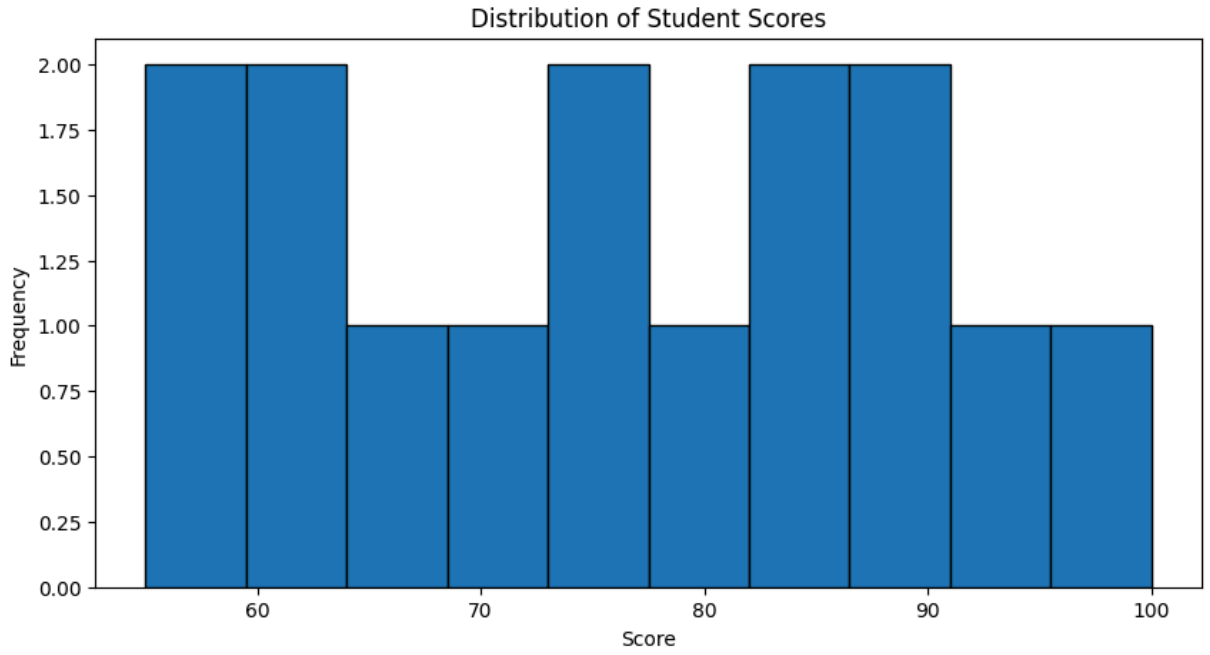


In [3]:
```
# 3. Subplot with line plot and bar chart for temperatures
temperatures = [30, 32, 31, 29, 28, 27, 26]
days = range(1, 8)
plt.figure(figsize=(12, 5))
plt.subplot(1, 2, 1)
plt.plot(days, temperatures, marker='o')
plt.title('Temperature Line Plot')
plt.xlabel('Day')
plt.ylabel('Temperature (°C)')
plt.subplot(1, 2, 2)
plt.bar(days, temperatures)
plt.title('Temperature Bar Chart')
plt.xlabel('Day')
plt.ylabel('Temperature (°C)')
plt.show()
```



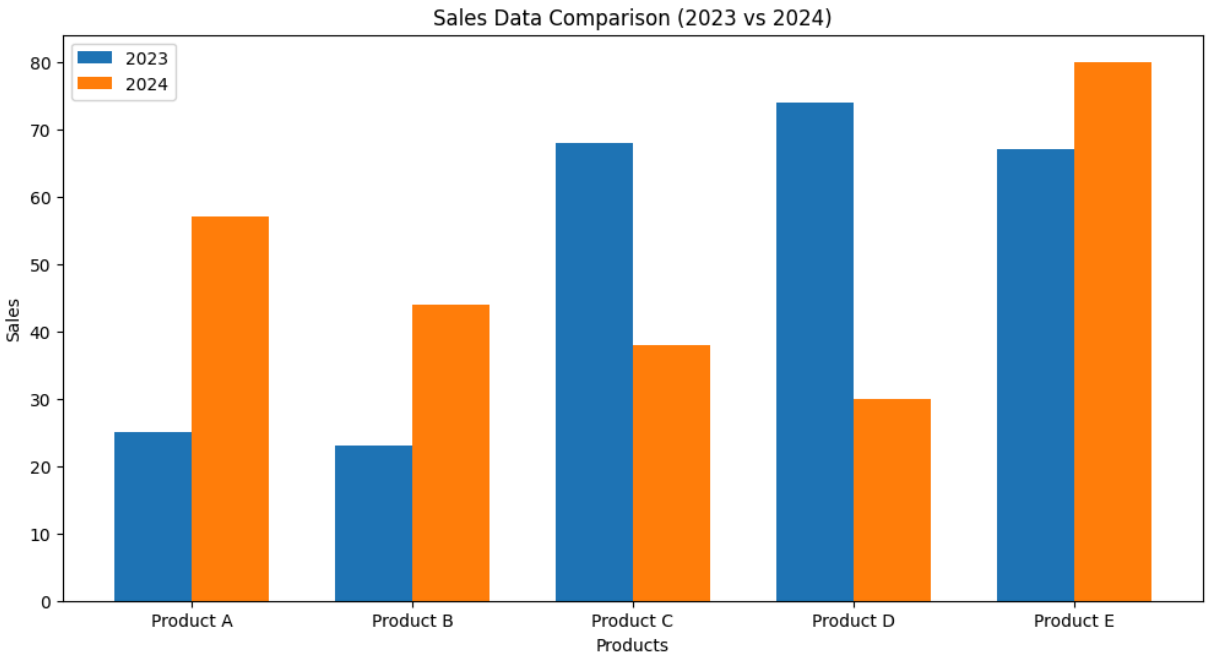


In [4]:
```
# 4. Histogram for student scores
scores = [55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 55, 60, 75, 85, 90]
plt.figure(figsize=(10, 5))
plt.hist(scores, bins=10, edgecolor='black')
plt.title('Distribution of Student Scores')
plt.xlabel('Score')
plt.ylabel('Frequency')
plt.show()
```



In [6]:
```
# 5. Grouped bar chart for sales data of two years
products = ['Product A', 'Product B', 'Product C', 'Product D', 'Product E']
sales_2023 = np.random.randint(20, 80, 5) # Generate random sales data for 2023
sales_2024 = np.random.randint(30, 90, 5) # Generate random sales data for 2024

x = np.arange(len(products))
width = 0.35
```

```
plt.figure(figsize=(12, 6))
plt.bar(x - width/2, sales_2023, width, label='2023')
plt.bar(x + width/2, sales_2024, width, label='2024')
plt.title('Sales Data Comparison (2023 vs 2024)')
plt.xlabel('Products')
plt.ylabel('Sales')
plt.xticks(x, products)
plt.legend()
plt.show()
```



In [ ]: