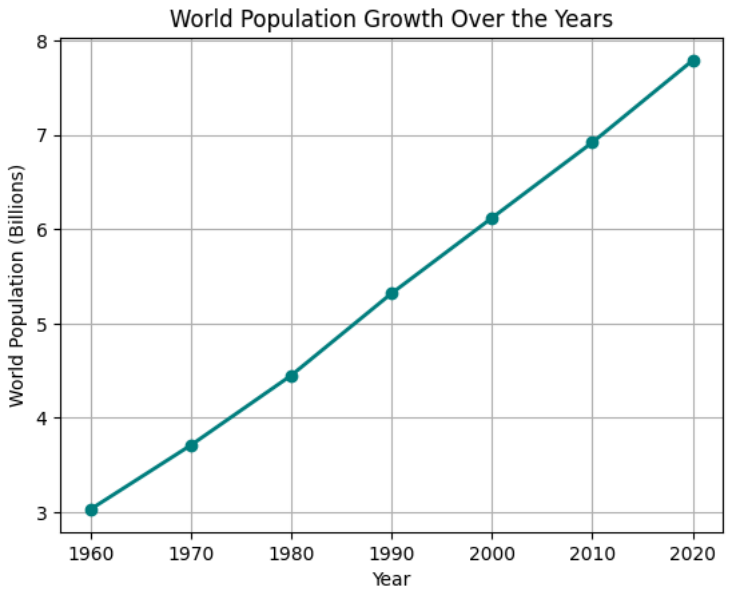
```
import pandas as pd
import matplotlib.pyplot as plt

# Load dataset (or create sample data)
data = pd.DataFrame({
    "Year": [1960, 1970, 1980, 1990, 2000, 2010, 2020],
    "Population (Billions)": [3.03, 3.71, 4.45, 5.32, 6.12, 6.92, 7.79]
})

# Plot line chart
plt.plot(data["Year"], data["Population (Billions)"], marker='o', color='teal', linewidth=2)

# Add labels and title
plt.xlabel("Year")
plt.ylabel("World Population (Billions)")
plt.title("World Population Growth Over the Years")

# Grid and display
plt.grid(True)
plt.show()

# Insights
growth_rate = (data["Population (Billions)"].iloc[-1] - data["Population (Billions)"].iloc[0]) / data["Population (Billions)"].
print(f"Global population grew by approximately {growth_rate:.2f}% from 1960 to 2020.")
```

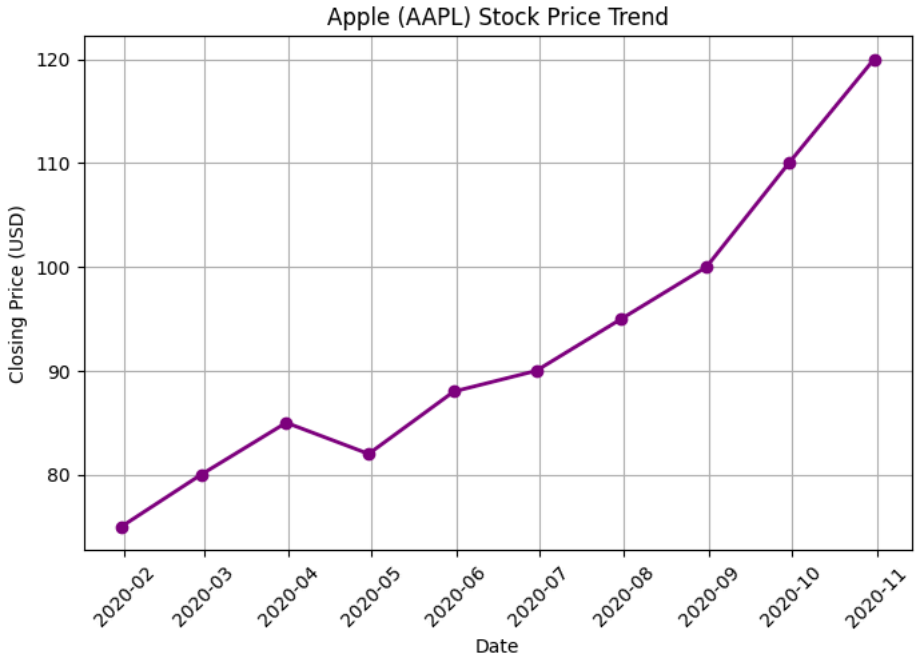



```
Global population grew by approximately 157.10% from 1960 to 2020.
```

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

# Sample Apple stock dataset
data = pd.DataFrame({
    "Date": pd.date_range(start="2020-01-01", periods=10, freq='M'),
    "Close": [75, 80, 85, 82, 88, 90, 95, 100, 110, 120]
})

# Plot line chart
plt.figure(figsize=(8, 5))
plt.plot(data["Date"], data["Close"], color='purple', marker='o', linestyle='-', linewidth=2)

# Add labels and title
plt.xlabel("Date")
plt.ylabel("Closing Price (USD)")
plt.title("Apple (AAPL) Stock Price Trend")

# Rotate date labels for clarity
plt.xticks(rotation=45)

# Add grid
plt.grid(True)

# Show chart
plt.show()

# Insights
start_price = data["Close"].iloc[0]
```

```
end_price = data["Close"].iloc[-1]
growth = ((end_price - start_price) / start_price) * 100
print(f"Apple stock price increased by {growth:.2f}% over the given period.")
```

```
/tmp/ipython-input-269618133.py:6: FutureWarning: 'M' is deprecated and will be removed in a future version, please use 'ME' ir
  "Date": pd.date_range(start="2020-01-01", periods=10, freq='M'),
```




```
Apple stock price increased by 60.00% over the given period.
```