

-- TEST SQL TEMPLATE

-- FACTUAL, EASY

1. Question: What was the opening price of Boeing on August 1, 2023?

Answer: \$237.55

2. Question: What was the closing price of Microsoft on March 15, 2024?

Answer: \$413.26

3. What was the highest price Apple reached on February 28, 2025?

Answer: \$242.09

4. Question: What was the lowest price Disney traded at on November 1, 2023?

Answer: \$79.20

5. Question: What was the trading volume of Apple on January 3, 2024?

Answer: 58,414,500 shares

6. Question: what is dividends of apple of november 10, 2023

Answer: 0.24

7. Question: what is stock split of apple of november 10, 2023

Answer: 0.0

8. Question: What is the ticker symbol for Microsoft

Answer: The ticker symbol for Microsoft is MSFT.

9. Question: Which sector does UnitedHealth Group belong to?

Answer: Healthcare

10. Question: Industry of Walmart Inc. ?

Answer: Discount Stores

11. Question: Country of Verizon?

Answer: United States

12. Question: website of 3M Company?

Answer: <https://www.3m.com>

13. Question: market cap of Boeing?

Answer: 134175367168

14. Question: P/E ratio of Salesforce?

Answer: 42.18

15. Question: Dividend yield of Coca-Cola?

Answer: 284

16. Question: 52 week high of American Express Company?

Answer: The 52 week high of American Express Company is 326.27.

17. Question: 52 week low of Goldman Sachs Group?

Answer: The 52 week low of Goldman Sachs Group is 425.19.

-- FACTUAL, MEDIUM

1. Question: What was the lowest opening price of Verizon in 2023, and on what date did it occur?

Answer: The lowest opening price of Verizon in 2023 was 27.87, and it occurred on 2023-10-09.

2. Question: On what date did Apple stock reach its highest closing price in 2024, and what was that price?

Answer: Apple stock reached its highest closing price of 258.74 on 2024-12-26.

3. Question: How many dividends did Apple pay in 2024?

Answer: 4

4. Question: What dividend per share did Microsoft pay on May 17, 2023?

Answer: \$0.68

5. Question: On what date did Walmart execute a stock split, and what was the split ratio?

Answer: February 26, 2024 (3-for-1 split)

6. Question: On which dates in 2024 did Microsoft pay dividends, and what were the amounts?

Answer: Mar 14 (\$0.75), May 15 (\$0.75), Aug 8 (\$0.75), Nov 21 (\$0.83)

-- COMPARATIVE, EASY

1. Question: On January 15, 2025, which company had a higher closing price, Apple or Microsoft?

Answer: On January 15, 2025, Microsoft had a higher closing price at \$425.46, compared to Apple's \$237.61

2. Question: On July 1, 2024, which had a lower opening price: Coca-Cola or McDonald's

Answer: On July 1, 2024, Coca-Cola had a lower opening price (62.65) than McDonald's (250.40).

3. Question: On October 2, 2024, which company had a higher intraday high: Goldman Sachs or Visa?

Answer: On October 2, 2024, Goldman Sachs had a higher intraday high (489.99) than Visa (276.65).

4. Question: On November 5, 2024, which company had a lower intraday low, Amgen or Boeing

Answer: On November 5, 2024, Boeing had a lower intraday low of 150.65 compared to Amgen's 308.05.

5. Question: On December 11, 2024, which company had a higher volume, Disney or Coca Cola?

Answer: On December 11, 2024, Coca-Cola had a higher volume (32,819,000) than Disney (6,426,800).

-- COMPARATIVE, MEDIUM

1. Question: On what date did Apple stock reach its highest closing price in 2024, and what was that price?

Answer: On December 26, 2024, Apple stock reached its highest closing price of \$258.74.

2. Question: What was the lowest opening price of Verizon in 2023, and on what date did it occur?

Answer: The lowest opening price of Verizon in 2023 was \$27.87, and it occurred on 2023-10-09.

3. Question: Which company had the highest average trading volume in 2024

Answer: The company with the highest average trading volume in 2024 was Intel Corporation with an average volume of 61,634,910.

4. Question: Which company had the lowest volatility (standard deviation of daily returns) in 2024?

Answer: The lowest volatility in 2024 is Coca-Cola Company (The) (KO) with a volatility of 0.008.

5. Question: Which company experienced the highest single-day percentage drop in 2023?

Answer: Walgreens Boots Alliance, Inc. (WBA) experienced the highest single-day percentage drop in 2023, with a drop of -6.91%.

6. Question: Which company experienced the highest single-day percentage gain in 2025?

Answer: Intel Corporation (INTC) experienced the highest single-day percentage gain in 2025, with a gain of 19.15%.

--COMPARATIVE, HARD

1. Question: Which company had the largest percentage increase in its stock price during 2024?

Answer: Walmart Inc. had the largest percentage increase in its stock price during 2024, with an increase of 72.2%.

2. Question: Which company had the largest percentage decline in stock price during 2024?

Answer: Walgreens Boots Alliance, Inc. had the largest percentage decline in stock price during 2024, with a decline of -62.13%.

3. Question: Which company had the largest absolute increase in closing price (in dollars) during 2024?

Answer: The Goldman Sachs Group, Inc. had the largest absolute increase in closing price, with an increase of \$192.55.

4. Question: Which company had the largest percentage decline in stock price during 2024?

Answer: Walgreens Boots Alliance, Inc. had the largest percentage decline in stock price during 2024, with a decline of 62.13%.

5. Question: By how many dollars did Boeing's closing price change from January 2, 2024 to December 31, 2024?

Answer: Boeing's closing price decreased by 74.76 USD from January 2, 2024 to December 31, 2024.

--ANALYTICAL, EASY

1. Question: What was the average closing price of Microsoft in March 2025?

Answer: The average closing price of Microsoft in March 2025 was 387.65.

2. Question: What was the average opening price of Apple during Q1 2025 (Jan–Mar 2025)?

Answer: The average opening price of Apple during Q1 2025 was \$231.49.

3. Question: What was the average opening price of Boeing in the first half of 2023?

Answer: The average opening price of Boeing in the first half of 2023 was \$207.34

4. Question: What was the average closing price of Boeing in the second half of 2023?

Answer: The average closing price of Boeing in the second half of 2023 was \$216.33.

5. Question: What was the average daily trading volume of Apple in 2024?

Answer: The average daily trading volume of Apple in 2024 was 57,127,254.

6. Question: By what percentage did Apple's stock price increase in 2024?

Answer: Apple's stock price increased by 35.56% in 2024.

7. Question: What was the moving average (30-day) closing price of Microsoft on April 30, 2024?

Answer: The 30-day moving average closing price of Microsoft on April 30, 2024, was \$412.95.

8. Question: What was Apple's highest weekly trading volume in 2024, and which week was it?

Answer: Apple's highest weekly trading volume in 2024 was 635,755,100 on the week of June 10, 2024.

-- ANALYTICAL, MEDIUM

1. Question: What was the total trading volume for Microsoft in 2024

Answer: The total trading volume for Microsoft in 2024 was 5,188,132,300.

2. Question: What was the average closing price of Boeing from July through December 2023

Answer: The average closing price of Boeing from July through December 2023 was \$216.33.

3. Question: Calculate the cumulative return of Microsoft from January 2 to December 31, 2024.

Answer: The cumulative return of Microsoft from January 2 to December 31, 2024 is 14.5%.

4. Question: Calculate the median closing price of Disney in 2024

Answer: The median closing price of Disney in 2024 was \$100.14.

5. Question: What was the compound annual growth rate (CAGR) of Apple from Jan 1, 2023 to Dec 31, 2024?

Answer: The CAGR of Apple from Jan 1, 2023 to Dec 31, 2024 is 24.21%.

-- TEST SQL LLM GENERATE

1. What was the average daily price range (high - low) of Microsoft stock in 2024?

Answer: The average daily price range (high - low) of Microsoft stock in 2024 was 6.90 USD.

2. Which are the top 5 companies by market capitalization that also have a P/E ratio below 30?

Answer: The top 5 companies by market capitalization with a P/E ratio below 30 are:

1. **JP Morgan Chase & Co.** (\$679.88 billion)

2. **UnitedHealth Group Incorporated** (\$386.16 billion)
3. **Procter & Gamble Company** (\$377.52 billion)
4. **Johnson & Johnson** (\$372.77 billion)
5. **Home Depot, Inc.** (\$357.46 billion)

3. What was the maximum drawdown of Goldman Sachs stock from January 1, 2024 to December 31, 2024?

Answer: The maximum drawdown of Goldman Sachs stock from January 1, 2024, to December 31, 2024, was a decrease of 9.82%.

4. Which company had the most consecutive days of price increase in 2024, and how many days was it?

Answer: Nike, Inc. had the most consecutive days of price increase in 2024, with 12 days.

5. What was the total dollar value traded (volume × closing price) for Apple in the first quarter of 2024?

Answer: The total dollar value traded for Apple in the first quarter of 2024 was \$680,740,301,482.83.

6. Which company had the highest average daily trading value (average of volume × closing price) in 2024?

Answer: Apple Inc. had the highest average daily trading value in 2024, at 11,653,176,462.71 USD.

7. What was the correlation coefficient between the daily closing prices of Apple and Microsoft in 2024?

Answer: The correlation coefficient between the daily closing prices of Apple and Microsoft in 2024 is 0.55.

8. How many trading days did Apple's closing price exceed its opening price in 2024?

Answer: There were 137 trading days in 2024 where Apple's closing price exceeded its opening price.

9. What was the average daily percentage change in closing price for Microsoft in 2024?

Answer: The average daily percentage change in closing price for Microsoft in 2024 is 0.06%.

10. which company had the highest price volatility (standard deviation of daily closing prices) in 2024?

Answer: Intel Corporation had the highest price volatility in 2024, with a standard deviation of daily closing prices of 0.03.

11.What was the total number of trading days for Boeing stock in 2024?

Answer: The total number of trading days for Boeing stock in 2024 was 252.

12. What was the average intraday price range (high minus low) of Johnson & Johnson during October 2024?

Answer: The average intraday price range (high minus low) for Johnson & Johnson during October 2024 was 2.01.

13. What was the volatility (standard deviation of daily returns) of Boeing stock in 2024

Answer: The volatility of Boeing stock in 2024 was 0.0215 (or 2.15%).

14. Which company had the most trading days where the closing price was at least 5% higher than the opening price in 2024?

Answer: Apple Inc. had the most trading days where the closing price was at least 5% higher than the opening price in 2024, with 2 days.

15. How many companies in the Healthcare sector had a P/E ratio between 15 and 25 as of December 31, 2024?

Answer: As of December 31, 2024, there are 3 companies in the Healthcare sector with a P/E ratio between 15 and 25.

-- TEST CHART

1. Plot the time series of Microsoft (MSFT) stock closing price from June 1, 2024 to September 30, 2024

2. Plot the histogram of daily returns of Boeing (BA) during 2024

3. plot a boxplot of monthly closing prices of Salesforce(CRM) for each month of 2023

4. Create a scatter plot of market capitalization versus P/E ratio for all DJIA companies as of April 26,

2025

5. Create a bar chart of the top 10 companies by market capitalization as of April 26, 2025

6. Create a pie chart showing the distribution of DJIA companies by sector

7. Plot a heatmap of the correlation matrix of daily returns in 2024 for AAPL, MSFT, JPM, BA, and

WMT.

8. Plot Microsoft (MSFT) daily closing price and its 30-day rolling average during 2024.

-- TEST RAG

1. What is the Dow Jones Industrial Average (DJIA)?

2. What does P/E ratio mean and how is it calculated?

3. What sectors are represented in the Dow Jones Industrial Average?

4. What is dividend yield and how is it different from dividend per share?

5. What were the key financial highlights or major events for Dow Inc. in 2024 according to the annual report?