SELECT

date,

volume,

SUM(volume) OVER (ORDER BY date) AS cumulative\_volume

FROM yum;

SELECT

EXTRACT(YEAR FROM date) AS year,

EXTRACT(MONTH FROM date) AS month,

SUM(volume) OVER (ORDER BY EXTRACT(YEAR FROM date), EXTRACT(MONTH FROM date)) AS cumulative\_volume

FROM yum

GROUP BY year, month;

SELECT

DAY(date) AS day\_of\_month,

ROW\_NUMBER() OVER (ORDER BY date) AS row\_number,

MIN(low) OVER (ORDER BY date ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW) AS cumulative\_low,

MAX(high) OVER (ORDER BY date ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW) AS cumulative\_high,

SUM(volume) OVER (ORDER BY date) AS cumulative\_total\_volume

FROM yum

WHERE EXTRACT(YEAR FROM date) = 2017 AND EXTRACT(MONTH FROM date) = 3;

SELECT

date,

close,

AVG(close) OVER (

ORDER BY date

ROWS BETWEEN 6 PRECEDING AND CURRENT ROW

) AS moving\_avg\_7d

FROM yum;

SELECT

date,

MIN(low) OVER (

ORDER BY date

ROWS BETWEEN 4 PRECEDING AND CURRENT ROW

) AS moving\_low\_5d,

MAX(high) OVER (

ORDER BY date

ROWS BETWEEN 4 PRECEDING AND CURRENT ROW

) AS moving\_high\_5d

FROM yum

WHERE EXTRACT(YEAR FROM date) = 2017 AND EXTRACT(MONTH FROM date) = 3;

WITH rolling\_data AS (

SELECT

date,

close,

MAX(high) OVER (

ORDER BY date

ROWS BETWEEN 6 PRECEDING AND CURRENT ROW

) AS h7,

MIN(low) OVER (

ORDER BY date

ROWS BETWEEN 6 PRECEDING AND CURRENT ROW

) AS l7

FROM yum

)

SELECT

date,

(h7 - close) / (h7 - l7) AS williams\_r

FROM rolling\_data;

WITH percent\_k\_cte AS (

SELECT

date,

close,

(close - MIN(low) OVER (

ORDER BY date

ROWS BETWEEN 13 PRECEDING AND CURRENT ROW

)) /

(MAX(high) OVER (

ORDER BY date

ROWS BETWEEN 13 PRECEDING AND CURRENT ROW

) - MIN(low) OVER (

ORDER BY date

ROWS BETWEEN 13 PRECEDING AND CURRENT ROW

)) AS percent\_k

FROM yum

),

percent\_d\_cte AS (

SELECT

date,

percent\_k,

AVG(percent\_k) OVER (

ORDER BY date

ROWS BETWEEN 2 PRECEDING AND CURRENT ROW

) AS percent\_d

FROM percent\_k\_cte

)

SELECT

date,

percent\_k,

percent\_d

FROM percent\_d\_cte;

WITH monthly\_avg AS (

SELECT

EXTRACT(YEAR FROM date) AS year,

EXTRACT(MONTH FROM date) AS month,

AVG(close) AS avg\_close

FROM yum

GROUP BY year, month

)

SELECT

year,

month,

avg\_close,

avg\_close - LAG(avg\_close) OVER (ORDER BY year, month) AS diff\_from\_prev\_month

FROM monthly\_avg;