Window Aggregate Functions

Syntax –

‘Window Aggregate Function’(Expression) OVER (PARTITION BY – Optional ORDER BY )

COUNT –

Returns number of rows in each window. It allows any data type.

Example –

SELECT order\_id, order\_date, COUNT(\*) OVER() TotalOrders

FROM pizza\_sales

SELECT order\_id, order\_date, COUNT(\*) OVER() TotalOrders,

COUNT(\*) OVER (PARTITION BY pizza\_id) Orders

FROM pizza\_sales

SELECT \*,

COUNT(\*) OVER () TotalCust,

COUNT(pizza\_id) OVER() Total

FROM pizza\_sales

To check the duplicity of the data

SELECT order\_id,

COUNT(\*) OVER (PARTITION BY order\_id) CheckPK

FROM pizza\_sales

SELECT \* FROM

(SELECT order\_id,

COUNT(\*) OVER (PARTITION BY order\_id) CheckPK

FROM pizza\_sales

)t WHERE CheckPK > 1

SUM –

Return the SUM of all values in the window

Example –

SELECT order\_id, pizza\_category, total\_price,

SUM(total\_price) OVER () TotalSales,

ROUND(total\_price / SUM(total\_price) OVER () \* 100, 5)

FROM pizza\_sales

AVG –

Example –

SELECT order\_id, order\_date, total\_price, pizza\_category,

AVG(total\_price) OVER (),

AVG (total\_price) OVER(PARTITION BY pizza\_category)

FROM pizza\_sales

MIN/MAX –

SELECT pizza\_id, order\_id, order\_date, pizza\_category,

MAX(total\_price) OVER (),

MIN(total\_price) OVER (),

MAX(total\_price) OVER (PARTITION BY pizza\_category),

MIN(total\_price) OVER (PARTITION BY pizza\_category)

FROM pizza\_sales

SELECT \* FROM (

SELECT \*, MAX(unit\_price) OVER () HighS

FROM pizza\_sales

)t

WHERE unit\_price = HighS

Running and Rolling Total –

Running total – SUM(Sales) OVER (ORDER BY Month)

Rolling total – SUM(Sales OVER (ORDER BY Month ROWS BETWEEN 2 PRECEDING AND CURRENT ROW)

Moving Average –

SELECT order\_id, pizza\_category, order\_date, total\_price,

AVG(total\_price) OVER (PARTITION BY pizza\_category),

AVG(total\_price) OVER (PARTITION BY pizza\_category ORDER BY order\_date)

FROM pizza\_sales

SELECT order\_id, pizza\_category, order\_date, total\_price,

AVG(total\_price) OVER (PARTITION BY pizza\_category),

AVG(total\_price) OVER (PARTITION BY pizza\_category ORDER BY order\_date),

AVG(total\_price) OVER (PARTITION BY pizza\_category ORDER BY order\_date ROWS BETWEEN CURRENT ROW AND 1 FOLLOWING) ROLLINGAVG

FROM pizza\_sales