/\*--Task 18: Rank distribution Functions

--Task 18 **ROUGH WORK[DOUBLE CHECK FOR ERRORS]** - **work [ REMOVE $ SIGN AND THEN EXECUTE THE QUERIES.]**

for example the query

**SELECT \* FROM FactSales$;**

Should be typed as

**SELECT \* FROM FactSales; \*/**

Rank distribution analytical functions calculate an aggregate value based on a group of rows. Unlike aggregate functions, however, analytic functions can return multiple rows for each group. Use these functions to compute moving averages, running totals or percentages within a group.

Try the following queries and have a look at the results. What are the differences between them? Do they do what you expect?

CUME\_DIST

The CUME\_DIST() calculates the cumulative distribution of a value within a group of values.

CUME\_DIST() function to calculate the sales percentile for each sales staff in 2021 and 2020.\*/

SELECT EmployeeFirstName, EmployeeLastName, YEAR(FactSales$.FullDateTime) AS [YEAR],

Round(CUME\_DIST () OVER (PARTITION BY YEAR(FactSales$.FullDateTime) ORDER BY SalesAmount),3) AS CumeDist

FROM DimEmployee$ inner join FactSales$ on DimEmployee$.EmployeeID = FactSales$.EmployeeID

Where YEAR(FactSales$.FullDateTime) IN (2021, 2020)

ORDER BY YEAR(FactSales$.FullDateTime) DESC;

/\*PERCENT\_RANK

The PERCENT\_RANK() function is similar to the CUME\_DIST() function. The PERCENT\_RANK() function evaluates the relative standing of a value within a partition of a result set.

PERCENT\_RANK() to calculate the sales percentile for each staff in 2021 and 2020.\*/

SELECT EmployeeFirstName, EmployeeLastName, YEAR(FactSales$.FullDateTime) AS [YEAR],

Round(PERCENT\_RANK () OVER (PARTITION BY YEAR(FactSales$.FullDateTime) ORDER BY SalesAmount),3) AS CumeDist

FROM DimEmployee$ inner join FactSales$ on DimEmployee$.EmployeeID = FactSales$.EmployeeID

Where YEAR(FactSales$.FullDateTime) IN (2021, 2020)

ORDER BY YEAR(FactSales$.FullDateTime) DESC;