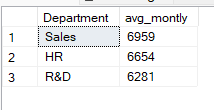
-- Find the top 5 departments with the highest average monthly income:

SELECT TOP 5 [Department], AVG([Monthly\_Income]) as avg\_montly FROM [HR].[dbo].[HR\_Data]

GROUP BY [dbo].[HR\_Data].[Department]

ORDER BY avg\_montly DESC;



-- Calculate the percentage of employees who have left the organization for each job level

SELECT

[Job\_Level],

-- Count the total number of employees for each job level

COUNT(\*) AS Total\_Employees,

-- Count the number of employees who have left (Attrition = 1)

COUNT(CASE WHEN [Attrition] = 1 THEN 1 ELSE NULL END) AS Ex\_Employees,

-- Calculate the percentage of employees who have left

ROUND(

(COUNT(CASE WHEN [Attrition] = 1 THEN 1 ELSE NULL END) \* 100.0) / COUNT(\*),

2

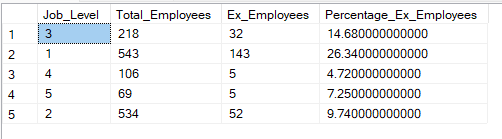
) AS Percentage\_Ex\_Employees

FROM

[dbo].[HR\_Data]

GROUP BY

[Job\_Level];



-- Retrieve employees who have the highest performance rating within each department

SELECT [Employee\_Number],

[Department],

[Performance\_Rating]

FROM [dbo].[HR\_Data]

WHERE [Performance\_Rating] = (

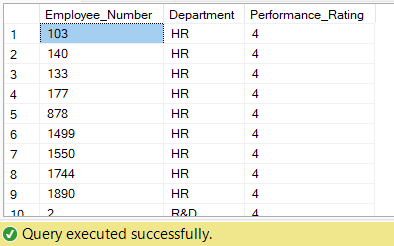
SELECT MAX([Performance\_Rating])

FROM [dbo].[HR\_Data] AS sub

WHERE sub.[Department] = [dbo].[HR\_Data].[Department]

)

ORDER BY [Department], [Performance\_Rating] DESC;

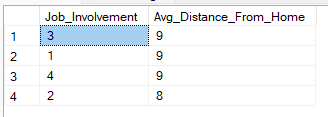


-- Find the average distance from home for employees with different levels of job involvement

SELECT [Job\_Involvement], AVG([Distance\_From\_Home]) as Avg\_Distance\_From\_Home

FROM [dbo].[HR\_Data]

GROUP BY [Job\_Involvement];



-- Calculate the average hourly rate for employees who work overtime and those who don't

SELECT

AVG(CASE WHEN [Over\_Time] = 1 THEN [Hourly\_Rate] ELSE null END) as AVG\_Hourly\_Rate\_For\_Overtime,

AVG(CASE WHEN [Over\_Time] = 0 THEN [Hourly\_Rate] ELSE null END) as AVG\_Hourly\_Rate\_For\_NON\_Overtime

FROM [dbo].[HR\_Data];



-- Retrieve employees who have worked for the maximum number of companies

SELECT [Employee\_Number],

[Department], [Num\_Companies\_Worked]

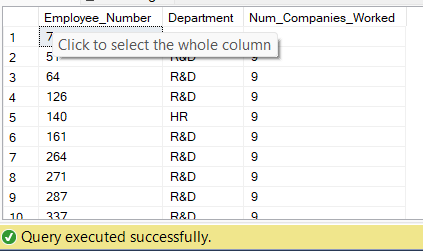
FROM [dbo].[HR\_Data]

WHERE [Num\_Companies\_Worked] = (

SELECT MAX([Num\_Companies\_Worked]) FROM [dbo].[HR\_Data]

)

ORDER BY [Num\_Companies\_Worked];



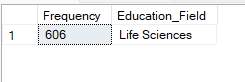
-- Find the most common education field among employees

SELECT TOP 1 COUNT(\*) as Frequency, [Education\_Field]

FROM [dbo].[HR\_Data]

GROUP BY [Education\_Field]

ORDER BY Frequency Desc;



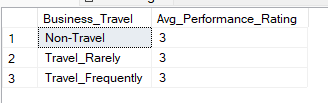
-- Calculate the average performance rating for employees in each business travel category

SELECT [Business\_Travel], AVG([Performance\_Rating]) AS Avg\_Performance\_Rating

FROM [dbo].[HR\_Data]

GROUP BY [Business\_Travel]

ORDER BY Avg\_Performance\_Rating DESC;



-- Retrieve employees who have the highest stock option level within each department

SELECT [Employee\_Number], [Department], [Stock\_Option\_Level]

FROM [dbo].[HR\_Data]

WHERE [Stock\_Option\_Level] = (

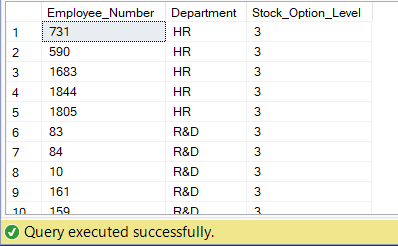
SELECT MAX([Stock\_Option\_Level])

FROM [dbo].[HR\_Data] AS sub

WHERE sub.[Department] = [dbo].[HR\_Data].[Department]

)

ORDER BY [Department], [Stock\_Option\_Level] DESC;



-- Find the total working years and average monthly income for employees with different levels of environment satisfaction

SELECT [Environment\_Satisfaction],

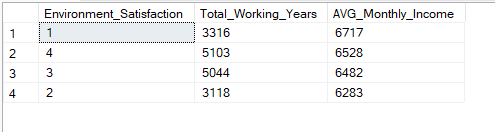
SUM([Total\_Working\_Years]) AS Total\_Working\_Years,

AVG([Monthly\_Income]) AS AVG\_Monthly\_Income

FROM [dbo].[HR\_Data]

GROUP BY [Environment\_Satisfaction]

ORDER BY AVG\_Monthly\_Income DESC;

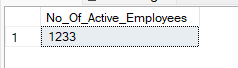


-- The number of active employees

SELECT COUNT(\*) AS No\_Of\_Active\_Employees

FROM [dbo].[HR\_Data]

WHERE [CF\_current\_Employee] = 1;



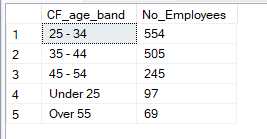
-- Find the number of employees by age group

SELECT [CF\_age\_band], COUNT(\*) AS No\_Employees

FROM [dbo].[HR\_Data]

GROUP BY [CF\_age\_band]

ORDER BY No\_Employees DESC;



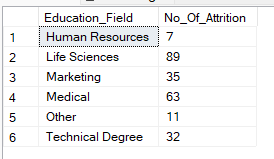
-- Display the attrition by education field

SELECT [Education\_Field], COUNT(CASE WHEN [Attrition] = 1 THEN 1 END) AS No\_Of\_Attrition

FROM [dbo].[HR\_Data]

GROUP BY [Education\_Field]

ORDER BY [Education\_Field];



-- Attrition rate by gender for different age group

SELECT [CF\_age\_band], [Gender],

COUNT(\*) AS Total\_Employees,

COUNT(CASE WHEN [Attrition] = 1 THEN 1 END) AS No\_Of\_Attrition,

ROUND(100.0 \* COUNT(CASE WHEN [Attrition] = 1 THEN 1 END) / COUNT(\*), 2) AS Attrition\_Rate

FROM [dbo].[HR\_Data]

GROUP BY [CF\_age\_band], [Gender]

ORDER BY [CF\_age\_band], [Gender];

