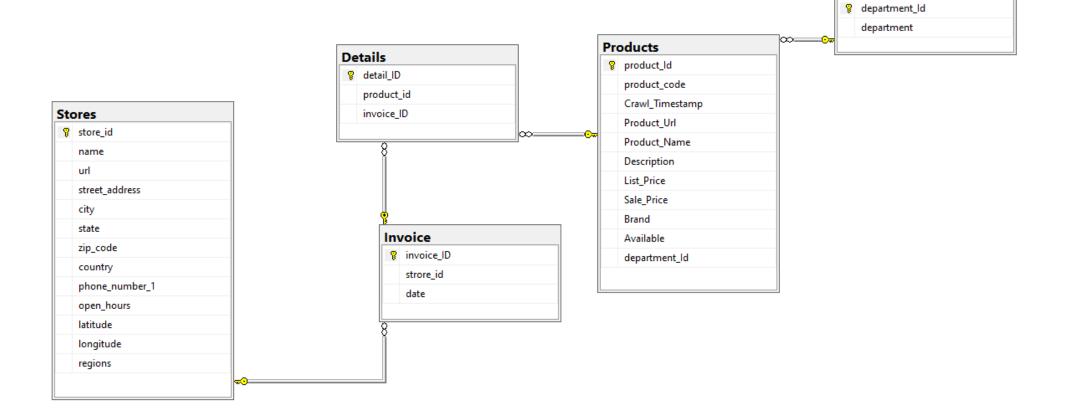


# SQL FOR DATA ANALYSIS

Mauricio Montero Marin

### WALMART DB



Database Diagrams

☐ Iables

System Tables

🕀 📕 FileTables

Graph Tables

■ dbo.Department\_Detail

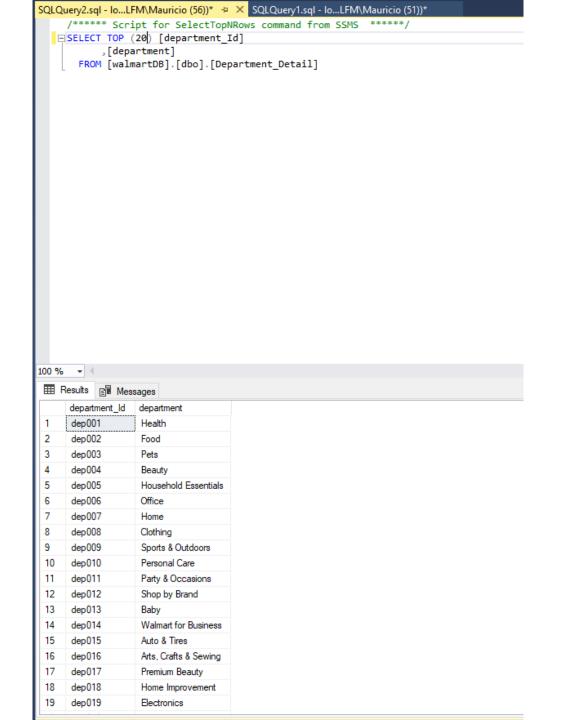
■ dbo.Details

dbo.Stores

Department\_Detail

### PRACTICE #1: PART 1

Run a query query that extracts the information from the first 20 rows, from each of the loaded bases, take a screenshot of each result and its respective query and save it as you will need it as evidence to validate the course deliverables.



```
SQLQuery3.sql - Io...LFM\Mauricio (57))* 

SQLQuery2.sql - Io...LFM\Mauricio (56)

/****** Script for SelectTopNRows command from SSMS 

SELECT TOP (20) [detail_ID]

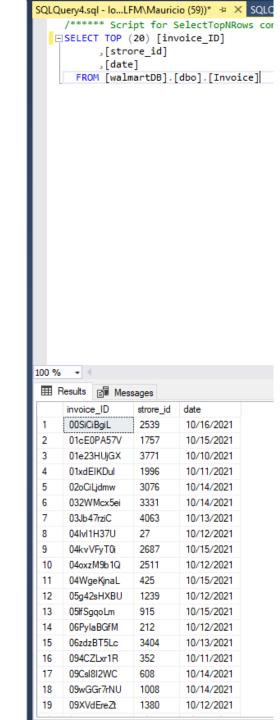
,[product_id]

,[invoice_ID]

FROM [walmartDB].[dbo].[Details]
```

100 % •							
⊞ R	Results 📑	Messages					
	detail_ID	product_id	invoice_ID				
1	1	1	FYvAyOZUkk				
2	2	2	QQPs2a6GQq				
3	3	3	FMNWyU7jGE				
4	4	4	KMsjcxipOU				
5	5	5	ZhZln7MiTg				
6	6	6	rO0uoe2cJn				
7	7	7	BKtUyni2ow				
8	8	8	GKElhNiWOZ				
9	9	9	gV7MaJiYyT				
10	10	10	MptYsGeSrK				
11	11	11	q90giyAnEF				
12	12	12	TS7KqErwGN				
13	13	13	yoe8jhEzii				
14	14	14	atVZy0ZYtn				
15	15	15	BhvKkLboFG				
16	16	16	B18o44XUZf				
17	17	17	uMB6soeJV4				
18	18	18	vMq58TZYOH				
19	19	19	krCgPUiwVe				

#### Query executed successfully.



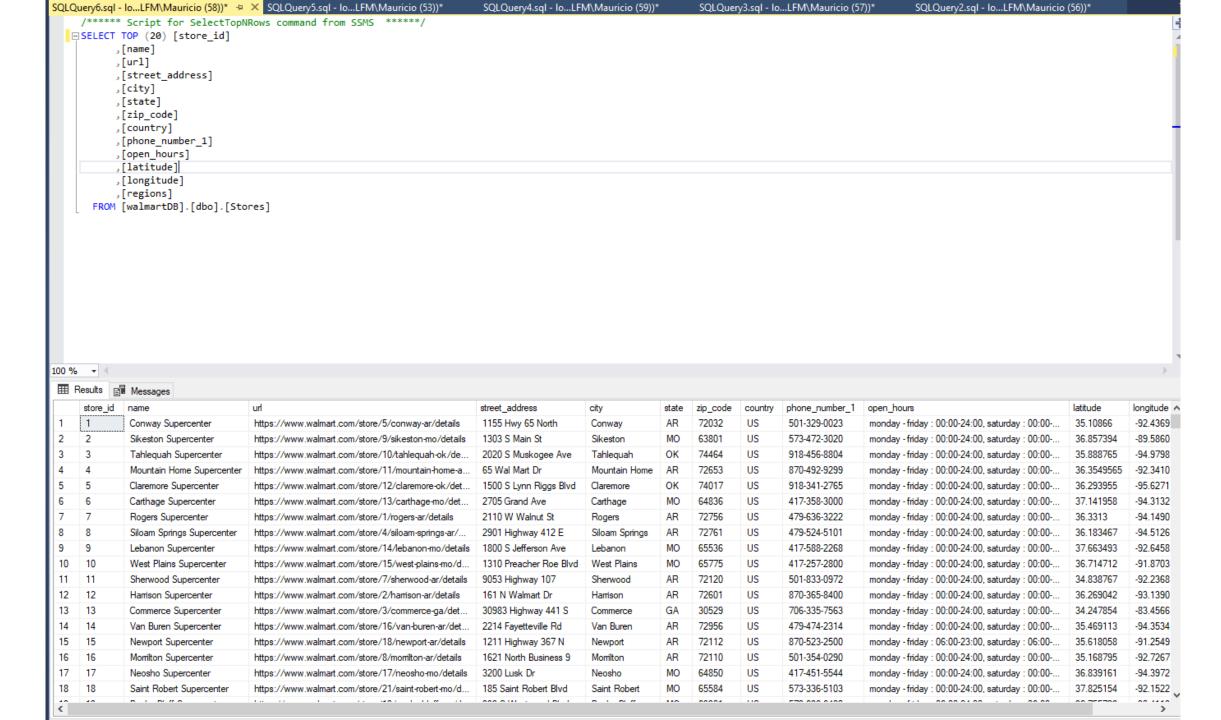


#### 100 % Results Messages product\_code Crawl Timestamp Product Url Product Name Description List Pric A product Id 3 19.99 4d237340ae8361b4bb4f51e8a6128c8b 2019-03-22 17:10:04 +0000 https://www.walmart.com/ip/ln-Style-Eyes-Cateye-Tw... In Style Eyes Cateve Two Tone Reading Glasses Stunning Looking Cat Eve Two Tone Reading Glasses a.. https://www.walmart.com/ip/In-Style-Eyes-Cateve-Tw... 4 d6dbc29d5782a88db9082d81ad04089c 2019-03-22 17:10:04 +0000 In Style Eyes Cateye Two Tone Reading Glasses Stunning Looking Cat Eye Two Tone Reading Glasses g... 19.99 5 9e51356d763e53dc622c92e3a86f9ef8 2019-03-22 17:46:46 +0000 https://www.walmart.com/ip/Upper-Crust-Caribbean-C... Upper Crust Caribbean Coconut Panko Bread Crumbs, 1. | Size information: 1-10 POUND Upper Crust Caribbean ... 39.96 6 6fe8e4a8b0983d9c7cb73196a0a1f619 2019-03-22 17:35:44 +0000 https://www.walmart.com/ip/Fish-Tank-Omament-Pla.. Fish Tank Omament Plastic Decoration Plant Suction C.. Material: Plastic; Plant Size: about 20 cm long Net Weig... 199.99 7 60a82e436e09d9e72d66457d0c0e1758 2019-03-22 18:11:13 +0000 https://www.walmart.com/ip/3-Pack-Black-Peel-Off-M. 3-Pack Black Peel-Off Mask for Deep Cleansing, Purifyi... ELIMINATES BLACKHEADS, ACNE, hair softener â€" A... 19.54 8 7ca0a58d3e8538acac5084765e93626f https://www.walmart.com/ip/Replacement-for-LIONE.. 32.51 2019-03-22 17:27:26 +0000 Replacement for LIONEL TOY TRAIN 671-75 replacem. Volts: 12.80 Watts: 50 Amps: 3.906 Bulb Shape: T2.75 ... 9 2c4a607ab9dae7ede8a499c6c7347ae3 2019-03-22 18:29:28 +0000 https://www.walmart.com/ip/American-Foxhound-Chri... American Foxhound Christmas Sticky Note Holder BB84... TAKE note! The perfect gift for anyone! This Sticky Note... 10.59 10 10 680 2c40b519adf279ec237c9d5cfefc0ddc 2019-03-22 18:34:21 +0000 https://www.walmart.com/ip/lronwood-Modular-3-H-x-.. Ironwood Modular 3" H x 23" W Desk Keyboard Platform Features: -Modular collection. -Color: Black. -1 Year warr... 11 11 7633b31b85e976bfc56eca208f0ec544 2019-03-22 18:34:03 +0000 https://www.walmart.com/ip/Classique-766-Post-Mast. Classique 766 Post Mastectomy Fashion Bra-Beige/Skin.. Classique 766 Post Mastectomy Fashion Bra-Beige/Skin... 56 12 12 c8a6826ae0a1045cf71aef1985ed9256 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-. Ames Walker AW Style 16 Sheer Support 15-20mmHg There's a reason our AW Style 16 Sheer Knee High is o... 46.99 13 13 11e02ac06b49a11143ce0ee86f69b7dd 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-. Ames Walker AW Style 16 Sheer Support 15-20mmHg There's a reason our AW Style 16 Sheer Knee High is o... 46.99 14 14 46.99 6a218b9b211175eb5fba8486f27be4d0 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-... Ames Walker AW Style 16 Sheer Support 15-20mmHg There's a reason our AW Style 16 Sheer Knee High is o... 15 15 54d34a7048c18592b10d5d00020198b5 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-.. Ames Walker AW Style 16 Sheer Support 15-20mmHg There's a reason our AW Style 16 Sheer Knee High is o... 46.99 16 16 46.99 dd2fdbf0de61d5bcb6b1cac9580804ac 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-.. Ames Walker AW Style 16 Sheer Support 15-20mmHg. There's a reason our AW Style 16 Sheer Knee High is o... 17 17 5d0333f53bb04dd23ecfbe6f3b7b109a 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-.. Ames Walker AW Style 16 Sheer Support 15-20mmHg There's a reason our AW Style 16 Sheer Knee High is o... 46.99 18 18 2019-03-22 17:46:54 +0000 46.99 a578eb34931d26e7e756ada8c913b53c https://www.walmart.com/ip/Ames-Walker-AW-Style-. Ames Walker AW Style 16 Sheer Support 15-20mmHq There's a reason our AW Style 16 Sheer Knee High is o... There's a reason our AW Style 16 Sheer Knee High is o... 19 19 6c5f5bd33aaa42366965ea20b2e55e49 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-.. Ames Walker AW Style 16 Sheer Support 15-20mmHg. 46.99 20 20 1fa1be63a258c4c8712de58a69333daf 2019-03-22 17:46:54 +0000 https://www.walmart.com/ip/Ames-Walker-AW-Style-... There's a reason our AW Style 16 Sheer Knee High is o... 46.99

<

Ames Walker AW Style 16 Sheer Support 15-20mmHg.

>



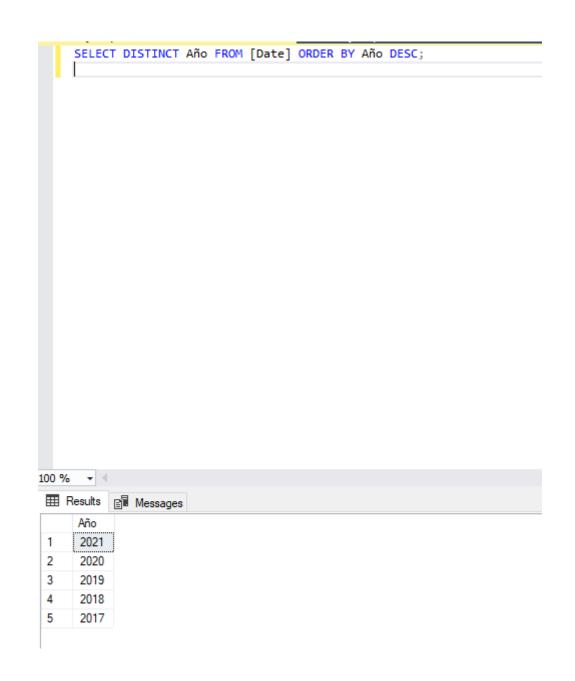
## PRACTICE #1: PART 2

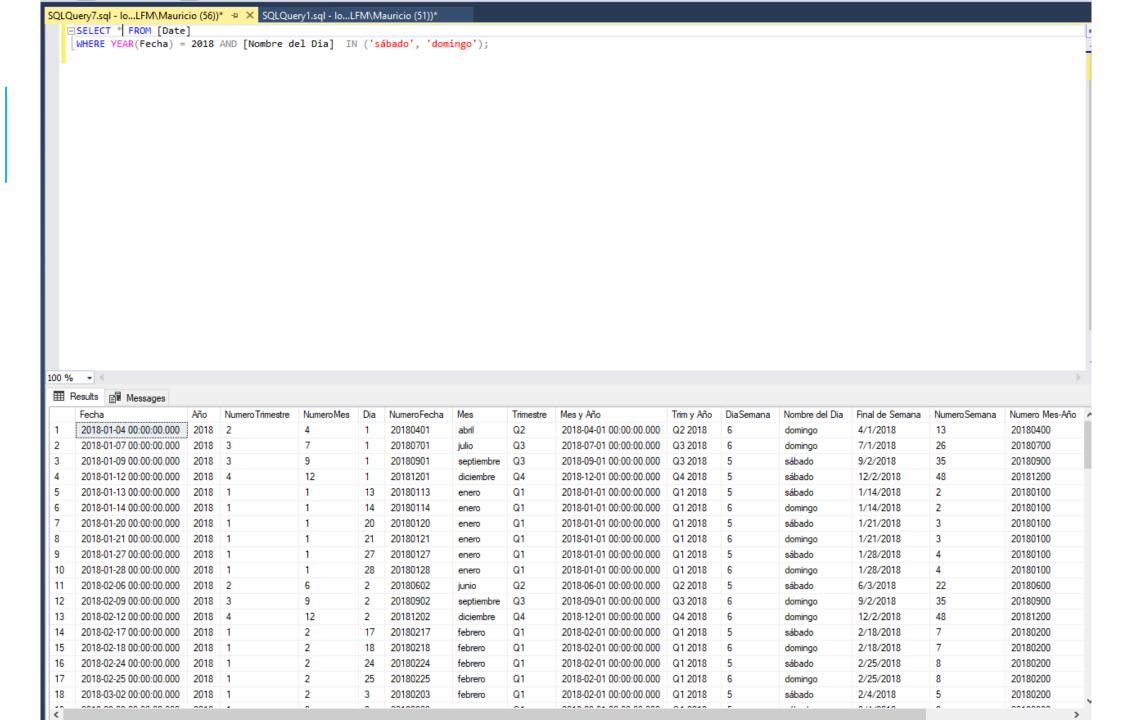
For any Data Analysis you will always have to perform an exploration with the information you are working on, so make your first querys. Selectiona de la Tabla **Date** las primeras 100 Filas.

- 1. Make a Distinctive query of the Year column and sort from most recent to oldest year. This will allow us to understand the scope of our Database. Extrae los fines de semana (sábado y domingo) en tu base de datos, del año 2018.
- 2. Make a query that brings the grouped months and order them from January to December
- 3. From the Electoral Roll Table, search for people who have the initial of the first name equal to the initial of your own name and that their first surname is also equal to your own first surname. For example, if your name is Esteban Madrigal, the query should bring all people with the surname Madrigal and that their name begins with "E".

SELECT TOP 100 \* FROM [Date];

	Results	Λ=-	Numero Trimestre	Numero Mes	D:-	Numero Fecha	Maa	Trimenton	M A2-	Trim A#a	D:- C	Nombre del Dia	Final de Semana	Numero Semana	Numero Mes-Año
	2017-01-01 00:00:00.000	Año 2017	1	Numerowes	Dia	20170101	Mes	Trimestre Q1	Mes y Año 2017-01-01 00:00:00.000	Trim y Año Q1 2017	DiaSemana 6	domingo	1/1/2017	numero Semana	20170100
,	2017-01-01 00:00:00:000	2017	1	2	1	20170101	febrero	Q1	2017-01-01 00:00:00:000	Q1 2017	2	miércoles	2/5/2017	6	20170100
	2017-01-02 00:00:00:000	2017	1	3	1	20170201		Q1	2017-02-01 00:00:00:000	Q1 2017	2	miércoles	3/5/2017	10	20170200
	2017-01-03 00:00:00:000	2017	2	4	1	20170301	marzo abril	Q2	2017-03-01 00:00:00:000	Q2 2017	5		4/2/2017	14	20170300
		,,,	2		1			-,-		-,	-	sábado			
	2017-01-05 00:00:00.000	2017	2	5	1	20170501	mayo	Q2	2017-05-01 00:00:00.000	Q2 2017	0	lunes	5/7/2017	19	20170500
	2017-01-06 00:00:00.000	2017	2	6	1	20170601	junio	Q2	2017-06-01 00:00:00.000	Q2 2017	3	jueves	6/4/2017	23	20170600
	2017-01-07 00:00:00.000	2017	3	7	1	20170701	julio	Q3	2017-07-01 00:00:00.000	Q3 2017	5	sábado	7/2/2017	27	20170700
	2017-01-08 00:00:00.000	2017	3	8	1	20170801	agosto	Q3	2017-08-01 00:00:00.000	Q3 2017	1	martes	8/6/2017	32	20170800
	2017-01-09 00:00:00.000	2017	3	9	1	20170901	septiembre	Q3	2017-09-01 00:00:00.000	Q3 2017	4	viemes	9/3/2017	36	20170900
)	2017-01-10 00:00:00.000	2017	4	10	1	20171001	octubre	Q4	2017-10-01 00:00:00.000	Q4 2017	6	domingo	10/1/2017	40	20171000
1	2017-01-11 00:00:00.000	2017	4	11	1	20171101	noviembre	Q4	2017-11-01 00:00:00.000	Q4 2017	2	miércoles	11/5/2017	45	20171100
2	2017-01-12 00:00:00.000	2017	4	12	1	20171201	diciembre	Q4	2017-12-01 00:00:00.000	Q4 2017	4	viemes	12/3/2017	49	20171200
3	2017-01-13 00:00:00.000	2017	1	1	13	20170113	enero	Q1	2017-01-01 00:00:00.000	Q1 2017	4	viemes	1/15/2017	3	20170100
4	2017-01-14 00:00:00.000	2017	1	1	14	20170114	enero	Q1	2017-01-01 00:00:00.000	Q1 2017	5	sábado	1/15/2017	3	20170100
5	2017-01-15 00:00:00.000	2017	1	1	15	20170115	enero	Q1	2017-01-01 00:00:00.000	Q1 2017	6	domingo	1/15/2017	3	20170100
;	2017-01-16 00:00:00.000	2017	1	1	16	20170116	enero	Q1	2017-01-01 00:00:00.000	Q1 2017	0	lunes	1/22/2017	4	20170100
, 7	2017-01-17 00:00:00.000	2017	1	1	17	20170117	enero	Q1	2017-01-01 00:00:00:000	Q1 2017	1	martes	1/22/2017	4	20170100
		2017	1	1	10					-,	2			4	
8	2017-01-18 00:00:00.000	2017	1	1	18	20170118	enero	Q1	2017-01-01 00:00:00.000	Q1 2017	2	miércoles	1/22/2017	4	20170100





```
SQLQuery7.sql - Io...LFM\Mauricio (56))* + X SQLQuery1.sql - Io...LFM\N
   □ SELECT Mes
     FROM [Date]
     GROUP BY Mes
     ORDER BY CASE Mes
                WHEN 'enero' THEN 1
                WHEN 'febrero' THEN 2
                WHEN 'marzo' THEN 3
                WHEN 'abril' THEN 4
                WHEN 'mayo' THEN 5
                WHEN 'junio' THEN 6
                WHEN 'julio' THEN 7
                WHEN 'agosto' THEN 8
                WHEN 'septiembre' THEN 9
                WHEN 'octubre' THEN 10
                WHEN 'noviembre' THEN 11
                WHEN 'diciembre' THEN 12
              END;
100 % 🕶 🖣
 Mes
      enero
      febrero
      marzo
      abril
      mayo
     junio
      julio
      agosto
      septiembre
      octubre
     noviembre
     diciembre
```

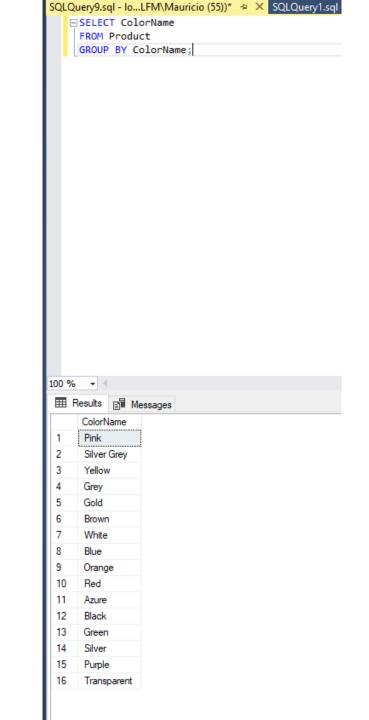
□SELECT \* FROM Registro\_Nacional
WHERE Nombre LIKE 'M%' AND Primer\_apellido = 'Montero';

⊞ Results										
	Cedula	Cod_electoral	Genero	Fecha_caduciddad	Junta_receptora	Nombre	Primer_apellido	Sugundo_apellido		
1	101280667	108001	2	2023-01-18	0	MERCEDES	MONTERO	SALAZAR		
2	101620935	101017	2	2022-04-30	0	MERCEDES	MONTERO	CHACON		
3	101650879	108001	2	2022-04-09	0	MARIA	MONTERO	ZELEDON		
4	101690148	102001	2	2025-07-15	0	MARIA LILIAN	MONTERO	BARQUERO		
5	101790299	101003	2	2022-06-30	0	MARIA EUGENIA	MONTERO	PANIAGUA		
6	101790577	108001	2	2030-02-04	0	MARIA DE LOS ANGELES	MONTERO	ORTIZ		
7	101840421	114001	2	2023-11-07	0	MIRIAM	MONTERO	GONZALEZ		
8	101910305	101034	2	2023-05-23	0	MARIA EMILIA	MONTERO	ARTAVIA		
9	101970128	101012	1	2022-05-31	0	MANUEL EMILIO	MONTERO	MORA		
10	101990152	102003	2	2030-02-04	0	MARIA DE LOS ANGELES	MONTERO	MARICHAL		
11	102010643	101007	2	2025-08-17	0	MARGARITA	MONTERO	OVIEDO		
12	102020398	108001	2	2028-05-18	0	MARIA ISABEL	MONTERO	RODRIGUEZ		
13	102020587	205001	2	2028-02-15	0	MARIA MERIDA	MONTERO	MORALES		
14	102020831	107013	2	2030-03-12	0	MARIA TERESA	MONTERO	UMA♦A		
15	102040151	115001	2	2030-02-04	0	MARGARITA	MONTERO	HERRA		
16	102060016	302020	2	2025-03-19	0	MARIA CECILIA	MONTERO	GOMEZ		
17	102060243	111001	2	2030-02-04	0	MARIA TERESA	MONTERO	QUIROS		
18	102110335	114001	2	2024-03-31	0	MARIA EUFEMIA	MONTERO	GONZALEZ		
19	102120784	108005	1	2025-02-17	0	MIGUEL EZEQUIEL	MONTERO	AMADOR		

#### PRACTICE #2

In this second practice you will use logic in the language of databases, and thus be able to extract our information ready to be analyzed. Perform the following querys: Para ello es importante empezar a explorar nuestros datos y verifique las tablas que te permita extraer la información.

- 1. Make a query where you extract the 16 different colors that exist. Extrae la Venta por Color y agrupa su resultado obteniendo únicamente los primeros 10 ID del color, asimismo confecciona una columna condicional nueva con los diferentes colores (en español). Para ello puedes tomar de referencia los nombres en inglés del resultado de la consulta anterior y ordena sus datos por ID de Color.
- 2. Extract the Sale by Name of the Day (Saturday, Sunday, Monday, ect) for the Asia and Europe Region, for the year 2018 and create a conditional column: if it is Saturday or Sunday indicating Weekend, otherwise Work Week. Realiza una consulta que extraiga la venta por Mes y Año. Sin embargo, el mes debe de traer únicamente las primeras 3 iniciales del mes en formato mayúscula para ello utilice las funciones de texto.
- 3. Make a query that contains in the Select statement:
- Month name
- Channel name
- Store type
- Continent name
- Monetary sale iin units
- Sort it from Highest to Lowest according to units
- This information will only be for the year 2018 and 2019 and from Monday to Friday



```
SQLQuery9.sql - Io...LFM\Mauricio (55))* □ × SQLQuery1.sql - Io...LFM\Mauricio (51))*
   ☐ SELECT TOP 10 p.ColorID, SUM(s.SalesQuantity) AS TotalVentas,
        CASE p.ColorName
            WHEN 'Pink' THEN 'Rosa'
            WHEN 'Silver' THEN 'Plateado'
            WHEN 'Grey' THEN 'Gris'
            WHEN 'Gold' THEN 'Dorado'
            WHEN 'Brown' THEN 'Marrón'
            WHEN 'White' THEN 'Blanco'
            WHEN 'Blue' THEN 'Azul'
            WHEN 'Yellow' THEN 'Amarillo'
            WHEN 'Orange' THEN 'Naranja'
            WHEN 'Red' THEN 'Rojo'
            WHEN 'Azure' THEN 'Celeste'
            WHEN 'Black' THEN 'Negro'
            WHEN 'Green' THEN 'Verde'
            WHEN 'Purple' THEN 'Morado'
            WHEN 'Transparent' THEN 'Transparente'
             ELSE p.ColorName
        END AS NombreColor
    FROM Sales s
    JOIN Product p ON s.ProductKey = p.Product_Key
    GROUP BY p.ColorID, p.ColorName
    ORDER BY p.ColorID;
```

100 %	•		
⊞R	esults 💅	Messages	
	ColorID	TotalVentas	NombreColor
1	1	251937	Celeste
2	2	10448965	Negro
3	3	1073887	Azul
4	4	1086430	Marrón
5	5	30905	Morado
6	6	1493124	Rojo
7	7	6534597	Plateado
8	8	8523581	Blanco
9	9	777530	Naranja
10	10	1327250	Rosa

```
⊟SELECT
       DATENAME(WEEKDAY, D.Fecha) as DiaSemana,
        CASE
            WHEN DATENAME(WEEKDAY, D.Fecha) = 'Saturday' OR DATENAME(WEEKDAY, D.Fecha) = 'Sunday'
            THEN 'Fin de Semana'
            ELSE 'Semana Laboral'
       END as TipoSemana,
       SUM(S.SalesQuantity) as Ventas
    FROM
        Sales as S
       JOIN Stores as ST ON S.StoreKey = ST.Store Key
       JOIN Geography as G ON ST.Geography Key = G.GeographyKey
       JOIN Date as D ON S.DateKey = D.Fecha
    WHERE
       YEAR(D.Fecha) = 2018
       AND G.ContinentName IN ('Asia', 'Europe')
    GROUP BY
       DATENAME(WEEKDAY, D.Fecha),
        CASE
            WHEN DATENAME(WEEKDAY, D.Fecha) = 'Saturday' OR DATENAME(WEEKDAY, D.Fecha) = 'Sunday'
            THEN 'Fin de Semana'
            ELSE 'Semana Laboral'
        END
    ORDER BY
        DiaSemana
00 % + <
Results Messages
    DiaSemana TipoSemana
                             Ventas
    Friday
               Semana Laboral 615451
    Monday
               Semana Laboral 633249
    Saturday
               Fin de Semana 619058
    Sunday
               Fin de Semana 623449
             Semana Laboral 611463
    Thursday
               Semana Laboral 623759
    Tuesday
    Wednesday Semana Laboral 619100
```

```
SELECT DATENAME(MONTH, d.Fecha) AS 'Nombre del Mes',
        c.Channel_Key AS 'Nombre del Canal',
        st.StoreType AS 'Tipo de Tienda',
        g.ContinentName AS 'Nombre del Continente',
        SUM(SalesQuantity) AS 'Unidades Vendidas',
        SUM(SalesAmount) AS 'Venta Monetaria'
 FROM Sales s
 JOIN Date d ON s.DateKey = d.Fecha
 JOIN Stores st ON s.StoreKey = st.Store_Key
 JOIN Geography g ON st.Geography_Key = g.GeographyKey
 JOIN Product p ON s.ProductKey = p.Product_Key
 JOIN Channel c ON s.channelKey = c.Channel_Key
 WHERE d.Fecha BETWEEN '2018-01-01' AND '2019-12-31'
  AND DATENAME(WEEKDAY, d.Fecha) NOT IN ('Saturday', 'Sunday')
 GROUP BY DATENAME (MONTH, d.Fecha), c.Channel Key, st.StoreType, g.ContinentName
 ORDER BY SUM(SalesQuantity) DESC;
```

	Nombre del Mes	Nombre del Canal	Tipo de Tienda	Nombre del Continente	Unidades Vendidas	Venta Monetaria
1	October	1	Store	North America	662080	170942193
2	May	1	Store	North America	644435	163101075
3	December	1	Store	North America	639132	160729863
4	November	1	Store	North America	633921	158687027
5	April	1	Store	North America	620357	154652655
6	July	1	Store	North America	603056	147696851
7	August	1	Store	North America	592571	149038448
8	June	1	Store	North America	586925	148207539
9	September	1	Store	North America	549774	138467756
10	January	1	Store	North America	442092	103138123
11	March	1	Store	North America	405820	100499702
12	February	1	Store	North America	403379	100214469
13	November	3	Catalog	North America	199497	49529533
14	December	1	Store	Asia	160639	40597671
15	April	1	Store	Europe	159907	41655125
16	February	1	Store	Europe	155740	38642450
17	May	1	Store	Europe	152334	38100684
18	November	1	Store	Asia	151743	40129204
19	July	1	Store	Europe	146240	37918613

#### FINAL PROJECT INSTRUCTIONS

#### **SQL** final project

For this project you will need to have uploaded the data tables that were requested in practice #1. In this project you will need to develop two Querys that extract important information to perform your analysis.

# **FIRST QUERY:**

This query must contain in its structure:

- Text Functions (at least 2)
- At least one Join Date Functions (at least 2)
- Basic Math Operations (at least 1)
- Command Where, Group By, Order By

Click to explore data→

Country Broc Country Broc Pets 2	2825.95 261 10/16/20	21 10/10/20	21			
Country Broc Country Broc Pets	1669.45 191 10/16/20	21 10/10/20	21			
Puppia Dog Puppia Pets 2	2747.80 120 10/16/20	21 10/10/20	21			
Deago LED D Deago Pets 6	665.26 74 10/16/20	21 10/10/20	21			
UBesGoo Lar UBesGoo Pets	1039.48 52 10/16/20	21 10/10/20	21			
Girl12Queen Girl12Queen Pets	350.25 49 10/16/20	21 10/10/20	21			
Doco DCS005 DOCO Pets 6	634.95 34 10/16/20	21 10/10/20	21			
Mirage 52-28 52-28 XXLBBI Pets	483.60 30 10/16/20	21 10/10/20	21			
Auburn Leat Auburn Leat Pets	1182.42 27 10/16/20	21 10/10/20	21			
Aberdoggie   Mirage Pet P Sports & Out 3	390.95 25 10/16/20	21 10/10/20	21			
FurHaven Pe FurHaven Pe Pets	1318.77 23 10/16/20	21 10/10/20	21			
walt disney i buckle-dowr Pets	633.95 21 10/16/20	21 10/10/20	21			
Country Broc Country Broc Pets 3	359.00 20 10/15/20	21 10/10/20	21			
Country Broc Country Broc Pets 2	279.00 20 10/16/20	21 10/10/20	21			
Country Broc Country Broc Pets 2	287.20 16 10/16/20	21 10/10/20	21			
Boo French E 365 Printing Clothing 2	242.84 16 10/16/20	21 10/10/20	21			
Heepo Fashi Heepo Pets 1	109.20 15 10/16/20	21 10/11/20	21			
7" Straight Bi Pawstruck.cc Pets 2	2549.47 14 10/16/20	21 10/10/20	21			
batman dc cc buckle-dowr Pets	346.40 12 10/16/20	21 10/10/20	21			
Country Broc Country Broc Pets 2	210.40 12 10/16/20	21 10/11/20	21			
Country Broc Country Broc Pets	197.45 11 10/16/20	21 10/11/20	21			
Vibrant Life   Vibrant Life   Pets	49.57 11 10/16/20	21 10/10/20	21			
Parisian Pet Parisian Pet Pets	115.90 10 10/15/20	21 10/10/20	21			
University of Zokee-Unive Pets	105.12 8 10/16/20	21 10/10/20	21			
Heepo Tiger Heepo Pets 7	71.04 8 10/16/20	21 10/10/20	21			
ValueBull Bu ValueBull Pets 1	160.93 7 10/16/20	21 10/11/20	21			
Unique Bargi Unique Bargi Pets	95.94 6 10/15/20	21 10/10/20	21			
Shockproof I MIP Cell Phones	119.70 6 10/14/20	21 10/11/20	21			
iMounTEK DeiMounTEK Pets	171.30 6 10/14/20	21 10/10/20	21			
Apple iPhon MIP Cell Phones	119.70 6 10/16/20	21 10/10/20	21			
30 Pcs M6 x 3 Unique Barg, Industrial & 1	149.94 6 10/16/20	21 10/12/20	21			
American Pit Graphics and Health	54.95 5 10/16/20	21 10/12/20	21			
Coastal Pet F Coastal Pet F Pets	114.45 5 10/16/20	21 10/10/20	21			
Peppermint N/A Pets 8	87.25 5 10/16/20	21 10/11/20	21			
Plastic Pet P Unique Barg Pets 8	84.95 5 10/16/20	21 10/10/20	21			
Mirage 62-26 62-26 XLCR Pets 8	89.55 5 10/13/20	21 10/10/20	21			
Nylabone He Nylabone Pets 1	128.00 5 10/16/20	21 10/11/20	21			
My Gym Shir 365 PRINTIN Pets	137.24 4 10/15/20	21 10/11/20	21			
Pug Dog Pet Graphics and Pets	31.96 4 10/16/20	21 10/11/20	21			
Pet Toys, Kap Kapmore Pets	49.92 4 10/15/20	21 10/11/20	21			
Tuff Collar N Tuff Collar Pets 1	122.44 4 10/16/20	21 10/11/20	21			
Red Rose Wi N/A Pets 8	89.60 4 10/16/20	21 10/14/2021				
-	79.96 4 10/16/20		21			
Yorkie Dog w Accessory Av Cell Phones 8	87.96 4 10/15/20	21 10/11/20	21			
	73.76 4 10/14/20					
Elements Wa Zack & Zoey Pets 1	135.56 4 10/16/20		21			
Family Favor Mirage Pets 6	64.16 4 10/15/20		21			
	157.56 4 10/16/20					
	71.64 4 10/16/20					
	50.97 3 10/16/20					
	80.13 3 10/16/20					
Lookin' Good Fashion Pet Party & Occa 1						
	627.00 3 10/10/2					
	61.38 3 10/16/20					
	38.85 3 10/16/20					
	56.97 3 10/16/20					
		021 10/10/20				
Peel-n-Stick Home Comfc Home Impro		21 10/14/2021				
		21 10/13/2021				
	47.22 3 10/11/2					
	29.97 3 10/12/2					
Webkinz Pra Ganz Pets 5	56.48 2 10/13/20	21 10/12/20	21			

```
SQLQuery16.sql - I...LFM\Mauricio (57))
                                                                                                                                                                            SQLQuery1.sql - Io...LFM\Mauricio (51))* → ×
                                                                                SQLQuery15.sql - I...LFM\Mauricio (56))
                                                                                                                              SQLQuery14.sql - I...LFM\Mauricio (55))
                                             p.Product Name,
                                             p.Brand,
                                             dd.department,
                                             SUM(CAST(p.List Price AS DECIMAL(10, 2))) AS Total List Price,
                                             COUNT(*) AS Total Sales,
                                             MAX(i.date) AS Last_Sale_Date,
                                             MIN(i.date) AS First_Sale_Date
                                        FROM
                                             Products AS p
:har(255), not null)
                                             JOIN DETAILS AS d ON p.product Id = d.product id
5), null)
                                             JOIN Invoice AS i ON d.invoice ID = i.invoice ID
                                             JOIN Stores AS s ON i.strore id = s.store id
                                             JOIN Department_Detail AS dd ON p.department Id = dd.department Id
                                        WHERE
                                             s.regions = 'South'
                                             AND p.Available = 1
                                             AND MONTH(i.date) = 10
                                             AND YEAR(i.date) = 2021
                                             AND UPPER(p.Product Name) LIKE '%Dog%'
ull)
                                        GROUP BY
null)
                                             p.Product Name,
                                             p.Brand,
255), null)
                                             dd.department
                                        ORDER BY
                                             Total_Sales DESC;
                                  100 %
                                   Results Resages
                                         Product Name
                                                                                              Brand
                                                                                                                                       Total_List_Price
                                                                                                                                                       Total_Sales
                                                                                                                                                                   Last Sale Date
                                                                                                                                                                                    First_Sale_Date
                                                                                                                    department
                                         Country Brook Design 3/4 Inch Nylon Dog Leash (Variou...
                                                                                              Country Brook Design
                                                                                                                     Pets
                                                                                                                                       2825.95
                                                                                                                                                       261
                                                                                                                                                                     10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Country Brook Design Economy Nylon Dog Collars(Variou...
                                                                                              Country Brook Design
                                                                                                                    Pets
                                                                                                                                       1669.45
                                                                                                                                                       191
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Puppia Dog Soft Mesh Hamess and a Leash COMBO Col..
                                                                                              Puppia
                                                                                                                     Pets
                                                                                                                                       2747.80
                                                                                                                                                       120
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Deago LED Dog Collar Safety USB Rechargeable Flashin...
                                                                                              Deago
                                                                                                                     Pets
                                                                                                                                       665.26
                                                                                                                                                       74
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         UBesGoo Large Dog Pet Crate Kennel Warm Bed Beds ...
                                                                                              UBesGoo
                                                                                                                                                       52
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                                                                                                     Pets
                                                                                                                                       1039.48
                                                                                                                                                       49
                                         Girl 12Queen Summer Cute Small Dog Big Heart Print Dog...
                                                                                              Girl12Queen
                                                                                                                     Pets
                                                                                                                                       350.25
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Doco DCS005-10XL Double D-Ring Dog Neck Collar&#4...
                                                                                              DOCO
                                                                                                                     Pets
                                                                                                                                       634.95
                                                                                                                                                       34
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Mirage 52-28 XXLBBL Evil Rhinestone Dog Shirt Baby Bl...
                                                                                              52-28 XXLBBL
                                                                                                                     Pets
                                                                                                                                       483.60
                                                                                                                                                       30
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Aubum Leathercrafters Tuscany Leather Dog Collar
                                                                                                                                                       27
                                                                                                                                                                                     10/10/2021
                                                                                              Aubum Leathercrafters
                                                                                                                    Pets
                                                                                                                                       1182.42
                                                                                                                                                                    10/16/2021
                                         Aberdoggie NY Screenprint Shirts Yellow Lg (14)
                                                                                              Mirage Pet Products
                                                                                                                     Sports & Outdoors
                                                                                                                                       390.95
                                                                                                                                                       25
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         FurHaven Pet Dog Bed | Cooling Gel Memory Foam Ortho...
                                                                                              FurHaven Pet
                                                                                                                     Pets
                                                                                                                                       1318.77
                                                                                                                                                       23
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         walt disney movies tv shows santa jack vs boogey man s...
                                                                                              buckle-down
                                                                                                                     Pets
                                                                                                                                       633.95
                                                                                                                                                       21
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Country Brook Design® Purple Hawaiian Step-In Dog ...
                                                                                              Country Brook Design
                                                                                                                    Pets
                                                                                                                                       359.00
                                                                                                                                                       20
                                                                                                                                                                    10/15/2021
                                                                                                                                                                                     10/10/2021
                                         Country Brook Petz | Candy Cane Christmas Martingale D...
                                                                                              Country Brook Design
                                                                                                                                       279.00
                                                                                                                                                       20
                                                                                                                                                                                     10/10/2021
                                                                                                                     Pets
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                         Country Brook Design Premium Sophie's First Love Dog C...
                                                                                              Country Brook Design
                                                                                                                    Pets
                                                                                                                                       287.20
                                                                                                                                                       16
                                                                                                                                                                    10/16/2021
                                         Boo French Bulldog Womens Peach Round Neck Funny ...
                                                                                              365 Printing
                                                                                                                     Clothing
                                                                                                                                       242.84
                                                                                                                                                       16
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
                                                                                                                                                       15
                                         Heepo Fashion Lovely Dog Style Pet ID Tag Collar Neckl...
                                                                                              Нееро
                                                                                                                     Pets
                                                                                                                                       109.20
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/11/2021
                                         7" Straight Bully Sticks for Dogs [Large Thickness] (250 P...
                                                                                                                                                       14
                                                                                                                                                                                     10/10/2021
                                                                                              Pawstruck.com
                                                                                                                     Pets
                                                                                                                                       2549.47
                                                                                                                                                                    10/16/2021
                                         batman dc comics superhero large shield collage seatbelt ...
                                                                                              buckle-down
                                                                                                                     Pets
                                                                                                                                       346.40
                                                                                                                                                       12
                                                                                                                                                                    10/16/2021
                                                                                                                                                                                     10/10/2021
```

# **SECOND QUERY:**

This query must contain in its structure:

- Aggregation Functions (at least 2)
- At least one Join Logical Functions (at least 1)
- Commando Where (Logical Operations),
   Group By, Order By, Having
- Select Nested (at least 1)

Click to explore data →

Orlando Sup	125.615873	157133	Other
Tucson Supe	144.162420	157071	Other
Richmond St	63.191693	154373	Other
Tucson Neigl	112.185897	151952	Other
Indianapolis	81.344202	149753	$\sim$
Las Vegas Ne	101.339743	149128	Other
Oklahoma Ci	105.919871	148261	Other
Cleveland St	80.206779	143970	Other
Austin Super		143123	Other
Columbus St		138574	
Cincinnati Su		134820	
Mesa Superc		132319	
Gainesville S		130014	
Corpus Chris		129327	
Shreveport S		128308	
		126134	
Covington Su			
Athens Supe		124958	
Baton Rouge		119852	
Charlotte Su		119161	
Knoxville Su		118963	
Fayetteville		118877	
Bentonville		118299	
Wichita Sup€		117591	$\sim$
Tulsa Neight	229.452991	116859	Other
Columbus St	68.336405	114811	Other
Lincoln Supe	107.548837	113774	$\sim$
Winchester	68.714285	111882	Other
Omaha Supe	55.017021	111732	$\sim$
Savannah Su	63.879629	109504	Other
Springfield N		108811	$\sim$
Indianapolis	69.495726	108273	$\sim$
Kansas City S		106218	MW
Florence Sur		105347	Other
Clarksville St		105325	
Jackson Supe		105154	
Lubbock Sup		103639	
Murfreesbor		103416	
Marietta Sup		103389	
Atlanta Supe		103152	
Mobile Neig		103085	
Madison Sup		103083	
Franklin Sup		102834	
Colorado Spr		102721	
Brownsville		100968	
Montgomery		100609	
Birmingham			Other
Fort Wayne S		99675	
Conway Sup			Other
Decatur Supe			Other
Camden Sup			Other
Fredericksbu	72.730964	98738	Other
Virginia Bead	78.663265	98698	Other
Kissimmee S	258.632653	98514	Other
Fort Worth N	93.846153	97619	Other
Omaha Neig	104.610256	97371	$\sim$
Albuquerque	117.989743	97188	Other
Little Rock St		96756	Other
Georgetown	63.223350	96530	Other
Tallahassee :			Other
Glendale Ne			Other
Mesa Neight			Other
Tampa Neigh			Other
		33340	

```
SQLQuery1.sql - Io...LFM\Mauricio (51))* + ×
   □SELECT
          s.name AS Store_Name,
          AVG(CAST(p.List_Price AS decimal)) AS Avg_List_Price,
          SUM(CAST(d.guantity AS decimal)) AS Total_Sales_Quantity,
               WHEN s.regions = 'North' THEN 'N'
               WHEN s.regions = 'Midwest' THEN 'MW'
               ELSE 'Other'
          END AS Region_Code
     FROM
          Stores AS s
          JOIN Invoice AS i ON s.store_id = i.strore_id
          JOIN DETAILS AS d ON i.invoice ID = d.invoice ID
         JOIN Products AS p ON d.product_id = p.product_Id
     WHERE
          YEAR(i.date) = 2021
          AND MONTH(i.date) IN (10, 2, 3)
     GROUP BY
          s.name,
          s.regions
      HAVING
          AVG(CAST(p.List_Price AS decimal)) > 50
          Total_Sales_Quantity DESC
100 % ▼ ◀
Results Messages
      Store_Name
                                Avg_List_Price
                                              Total_Sales_Quantity
                                                                  Region_Code
      Charlotte Supercenter
                                 70.305084
                                               119161
                                                                  Other
      Knoxville Supercenter
                                 56.860759
                                               118963
                                                                  Other
      Fayetteville Neighborhood M..
                                 109.119658
                                               118877
                                                                  Other
      Bentonville Neighborhood M...
                                79.042735
                                               118299
                                                                  Other
      Wichita Supercenter
                                 97.358649
                                               117591
                                                                  MW
      Tulsa Neighborhood Market
                                 229.452991
                                               116859
                                                                  Other
      Columbus Supercenter
                                 68.336405
                                               114811
                                                                  Other
      Lincoln Supercenter
                                 107.548837
                                               113774
                                                                  MW
      Winchester Supercenter
                                 68.714285
                                               111882
                                                                  Other
      Omaha Supercenter
                                 55.017021
                                               111732
                                                                  MW
      Savannah Supercenter
                                 63.879629
                                               109504
                                                                  Other
      Springfield Neighborhood M.
                                67.568376
                                               108811
                                                                  MW
      Indianapolis Neighborhood .
                                 69.495726
                                               108273
                                                                  MW
                                 65.583333
       Kansas City Supercenter
                                               106218
                                                                   MW
       Florence Supercenter
                                 67.064516
                                               105347
                                                                  Other
      Clarksville Supercenter
                                 86.000000
                                               105325
                                                                  Other
      Jackson Supercenter
                                 118.629441
                                               105154
                                                                  Other
      Lubbock Supercenter
                                 66.055837
                                               103639
                                                                  Other
      Murfreesboro Supercenter
                                 132.704081
                                               103416
                                                                  Other

    Query executed successfully.

                                                                                                       localhost\
```

#### CONCLUSIONS

- 1. San Antonio Super Center is the store with the highest sales volume.
- 2. Shreveport Supercenter is the store with less sales
- 3. In the month of October the dog item that sold the most in the southern region was Country Brook Design 3/4 Inch Nylon Dog Leash (Various Colors & Lengths)
- 4. In the month of October the articles for dog with less rotation in the southern region were:

Rat Terrier Makes Me Happy \*1590\* 6 inch Sticker dog decal

mirage 614-02 bk-18 two row ab crystal black ice cream dog collar - size 18

Mirage 625-SV LV12 Crystal and Silver Spikes Dog Collar Lavender - Size 12

POLKA DOT-PURPLE-MULTI2-L 4 ft. Dot Dog Leash, Purple & Multi - Small

PetAlive Energy Tonic - All Natural Herbal Supplement Promotes Energy and Vitality in Cats and Dogs Including Older Pets - 60 Veggie Caps