



U D B  **V I R T U A L**
Universidad Don Bosco, El Salvador

Datawarehouse y Minería de datos (DMD941)

G01T

Desafio 1.

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Docente:

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I) Desarrollo de la actividad.

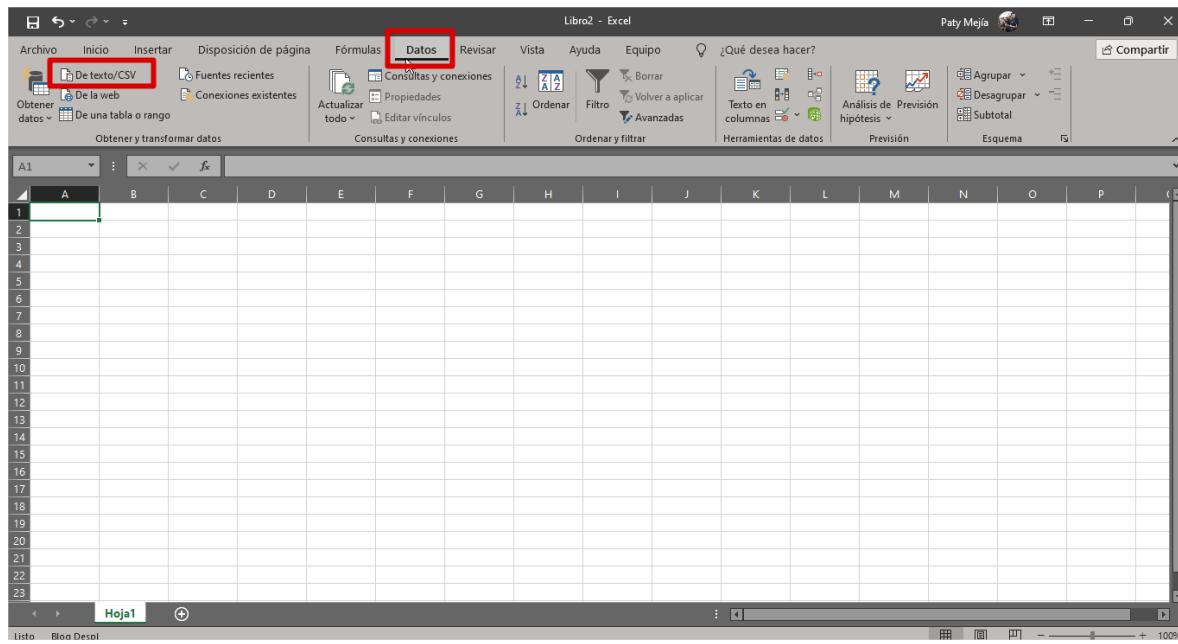
Ejercicio 1.

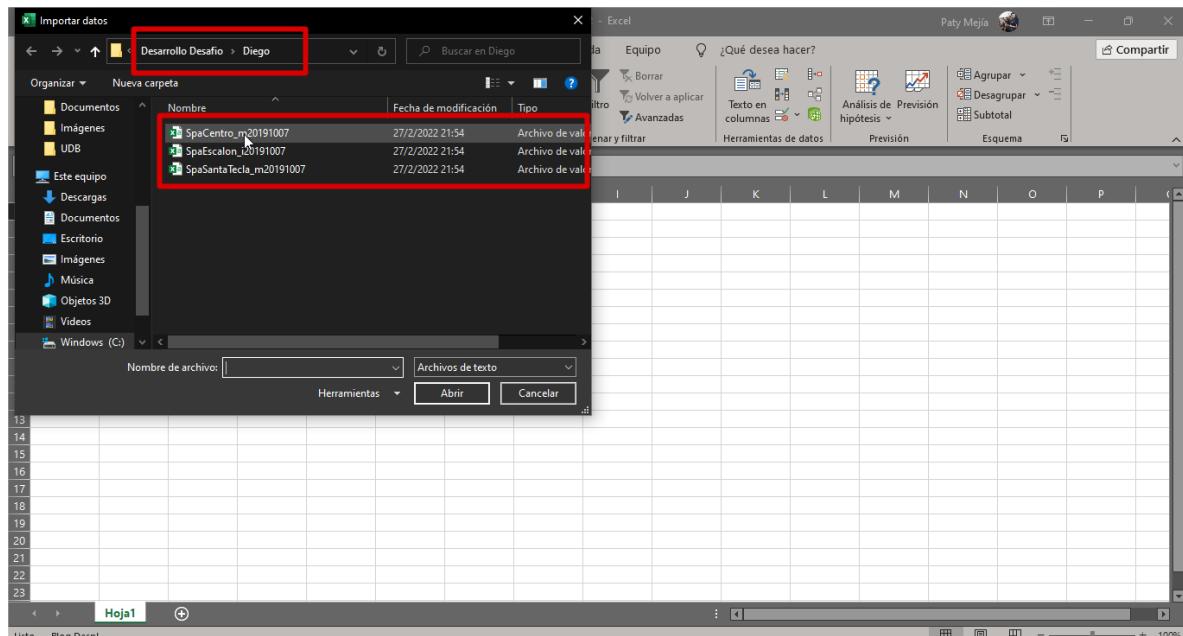
El Spa, "Diego", necesita segmentar sus clientes, para realizar una campaña de fidelización, y le pide a usted que efectúe un análisis de sus tres sucursales, que defina cuantos grupos y que características tienen.

Porcentaje alcanzado: 100%

Procedimiento:

1. Se revisa la información de los tres archivos recibidos para validar que la información coincida, o realizar las respectivas correcciones previas a la carga en la BD.





The screenshot shows the 'Importar datos' (Import Data) dialog box for 'SpaCentro_m20191007.csv'. The 'Delimitador' (Delimiter) dropdown is set to 'Coma'. The preview pane shows a table with columns: id, Sexo, Ingresos, PromVisit, Edad, Sauna, Masaje, Hidro, and Yoga. The 'Transformar datos' (Transform data) button is highlighted with a red box. The main Excel window shows a blank sheet titled 'Hoja1'.

id	Sexo	Ingresos	PromVisit	Edad	Sauna	Masaje	Hidro	Yoga
Tomkin Stickles	1	2555.23	1.94	21	1	1	0	0
Tyson Stovine	1	2476.87	5.83	29	1	1	0	1
Miller Carnachen	1	1209.36	6.07	23	1	0	0	0
Darnell Dine-Hart	1	1307.02	3.17	63	1	1	1	1
Wyatt Keyte	1	1511.78	2.08	41	0	0	0	0
Trip Vost	1	772.08	1.74	52	1	1	0	0
Ammamaria D'Errico	0	2749.35	4.58	41	0	0	1	1
Jessica Kuhn	1	1964.11	2.3	51	1	1	1	0
Hamnet Lindenberg	0	1577.93	2.44	62	1	1	1	0
Marga Kiley	0	1945.16	6.36	25	1	1	0	1
Pebrook Praton	1	1917.15	5.86	37	1	1	0	0
Koenraad Marchiso	1	699.14	2.64	34	1	0	1	0
Chase McManus	1	1945.28	2.52	47	0	1	1	1
Robinett Sauvan	1	2065.14	4.78	43	1	1	0	0
Jessica Dudding	1	988.99	3.72	47	1	1	0	1
Ortensia Krushev	1	1671.93	2.17	58	1	1	0	1
Wanda Micheli	1	977.44	1.37	50	0	1	0	0
Leora Sissens	0	1437.47	4.48	34	0	1	0	1
Gerti Askell	0	859.38	5.89	58	1	1	0	0
Benson Lehrahan	1	2366.25	4.27	35	0	0	0	0

SpaCentro_m20191007 - Editor de Power Query

PROPIEDADES

- Nombre: SpaCentro_m20191007
- Todas las propiedades

PASOS APLICADOS

- Origen
- Encabezados promovidos
- > Tipo cambiado**

VISTA PREVIA DESCARGADA A LAS 22:08

A ¹ Id	1 ² Sexo	1.2 ³ ingresos	1.2 ³ PromVisit	1 ² Edad	1 ² Sauna	1 ² Masaje	1 ² Hidro
1 Tomkin Stickles	1	2555.23	1.94	21	1	1	0
2 Tyson Stovine	1	2476.87	5.83	29	1	1	0
3 Miller Carnachen	1	1209.36	6.07	23	1	0	0
4 Darnell Dine-Hart	1	1307.02	3.17	63	1	1	1
5 Wyatt Keyte	1	1511.78	2.08	41	0	0	0
6 Trip Vost	1	772.08	1.74	52	1	1	0
7 Ammamaria D'Errico	0	2749.55	4.58	41	0	0	1
8 Jessica Kuhn	1	1964.11	2.3	51	1	1	1
9 Hamnet Lindenberg	0	1577.93	2.44	62	1	1	1
10 Marga Kiley	0	1945.16	6.36	25	1	1	0
11 Pebrook Praton	1	1917.15	5.86	37	1	1	0
12 Koenraad Marchiso	1	699.14	2.64	34	1	0	1
13 Chase McManus	1	1945.28	2.52	47	0	1	1
14 Robinett Sauvan	1	2065.14	4.78	43	1	1	0
15 Jessica Dudding	1	988.99	3.72	47	1	1	0
16 Ortensia Kruschew	1	1671.93	2.17	58	1	1	0
17 Wanda Micheli	1	977.44	1.37	50	0	1	0
18 Leora Sissens	0	1437.47	4.48	34	0	1	0
19 Gerti Askell	0	859.38	5.89	58	1	1	0
20 Benson Lehrahan	1	2366.25	4.27	35	0	0	0
21 Garwood Crosham	1	2128.22	1.28	26	1	0	0
22 Cathie O'Reilly	1	2457.09	3.05	64	1	0	0
23 Christal McFadden	1	410.3	5.81	54	1	1	1
24 Causton Turner	1	1779.81	6.81	44	1	1	0

9 COLUMNAS, 400 FILAS

SpaEscalon_i20191007 - Editor de Power Query

PROPIEDADES

- Nombre: SpaEscalon_i20191007
- Todas las propiedades

PASOS APLICADOS

- Origen
- Encabezados promovidos
- > Tipo cambiado**

VISTA PREVIA DESCARGADA A LAS 22:26

A ¹ Id	1 ² Sexo	1.2 ³ ingresos	1.2 ³ PromVisit	1 ² Edad	1 ² Sauna	1 ² Masaje	1 ² Hidro
1 Leoline Doffy	1	1150.52	1.79	35	0	0	1
2 Angelita Jaquemar	1	1458.84	2.82	36	1	1	0
3 Drugi Enriquez	0	1748.8	3.7	63	1	1	1
4 Britte Campe	1	1828.86	1.29	22	0	1	0
5 Sal Pyle	1	894.69	4.29	24	0	0	0
6 Genvieve Stading	1	2536.14	5.05	55	1	1	0
7 Emmrye Johannesson	1	1679.81	4.53	26	1	0	1
8 Ken Pylon	0	1817.95	5.31	49	1	0	0
9 Rocky Robertacci	0	1593.44	5.48	60	1	1	1
10 Brock Morena	1	1680.75	2.03	64	0	1	0
11 Madalena Tootting	1	711.88	4.29	29	1	0	0
12 Danna Pinock	1	1022.08	4.61	31	1	0	1
13 Hildagarde Caulkett	1	1847.22	5.72	22	1	1	1
14 Marketa Blades	0	1363.23	3.66	37	1	0	0
15 Kristy Laffranconi	1	1000.71	2.54	52	0	0	0
16 Noah Gamet	0	1284.82	6.37	35	0	0	0
17 Pip Wilfinger	1	818.07	4.62	62	1	1	1
18 Berti Joncic	1	763.83	3.7	40	0	0	0
19 Lissy Blekinsop	1	2052.17	3.46	23	1	1	0
20 Phil Wadsworth	1	1125.15	6.13	65	0	1	1
21 Christin Gillchrist	1	2274.88	5.24	40	1	1	1

9 COLUMNAS, 400 FILAS

SpaSantaTecla_m20191007 - Editor de Power Query

Consultas [1] | SpaSantaTecla_m201...

9 COLUMNAS, 250 FILAS

VISTA PREVIA DESCARGADA A LAS 22:28

	A ¹ Id	1 ² Sexo	1 ² Ingresos	1 ² PromVisit	1 ² Edad	1 ² Sauna	1 ² Masaje	1 ² Hidro
1	Cynthia Crich	0	1175.45	6.88	50	1	1	0
2	Felide Biglin	0	2956.11	6.08	32	0	1	0
3	Carey Billington	0	2454.94	3.27	25	1	1	1
4	Correy Dello	0	1253.4	1.93	42	0	1	0
5	Simmonds Pennazzi	0	1153.21	2.94	45	0	1	0
6	Karylyn Benit	0	2560.18	6.59	27	0	0	1
7	Bobbie Betjeman	0	2945.27	6.36	35	0	1	0
8	Rois Bust	0	1599.55	2.53	26	1	1	0
9	Tillie Frowd	0	2683.42	3.6	61	0	0	0
10	Hallie Edlington	0	1856.95	2.41	53	1	0	0
11	Lindy Harradence	0	581.43	4.7	61	0	1	0
12	Rozanne Kingsnorth	0	2834.67	5.28	44	0	1	1
13	Hew Poytress	0	664.08	2.4	29	0	0	0
14	Cleopatra Briars	0	2417.29	2.2	25	0	1	0
15	Reid Henriksen	1	2327.39	6.79	64	1	1	0
16	Anabella Buggell	0	786.44	2.5	22	0	0	1
17	Pris Van Vuuren	0	512.41	1.58	58	1	1	0
18	Licha McComuity	1	1164.59	3.18	45	0	0	1
19	Chevalier Defte	1	2610.6	1.32	64	0	0	0
20	Tedd Knappen	1	1696.28	5.61	35	1	1	0
21	Johan Blest	0	843.8	5.04	28	0	0	0
22	Nita Billon	0	2963.04	1.66	63	0	1	1
23	Perceval Hunnawill	1	708.44	4.23	61	0	1	1
24	Roxann Ravagli	0	1014.57	2.74	37	0	0	0

Observación: Se puede observar que los datos están en el mismo formato para los registros de los tres archivo CSV.

2. Se realiza la creación de la BD.

Microsoft SQL Server Management Studio

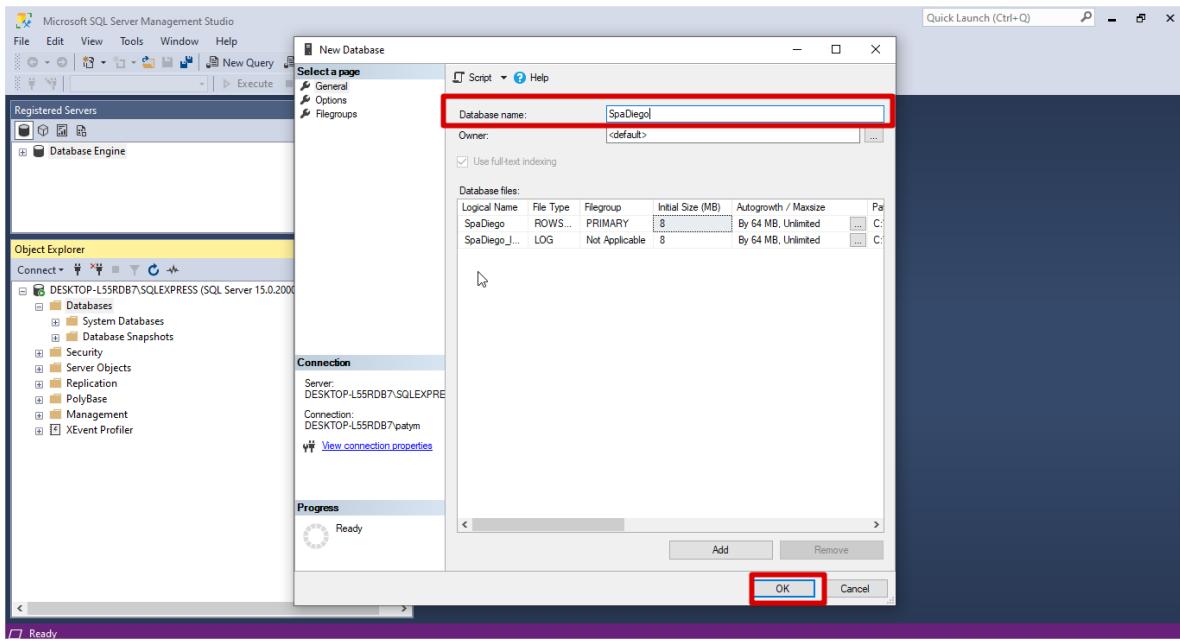
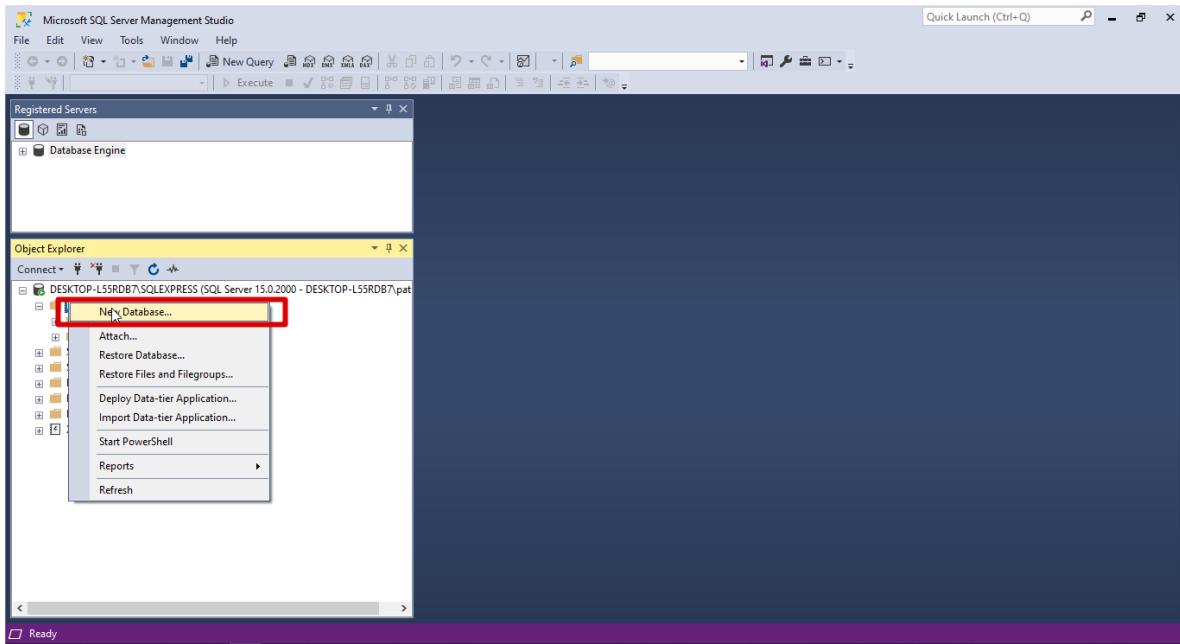
Registered Servers

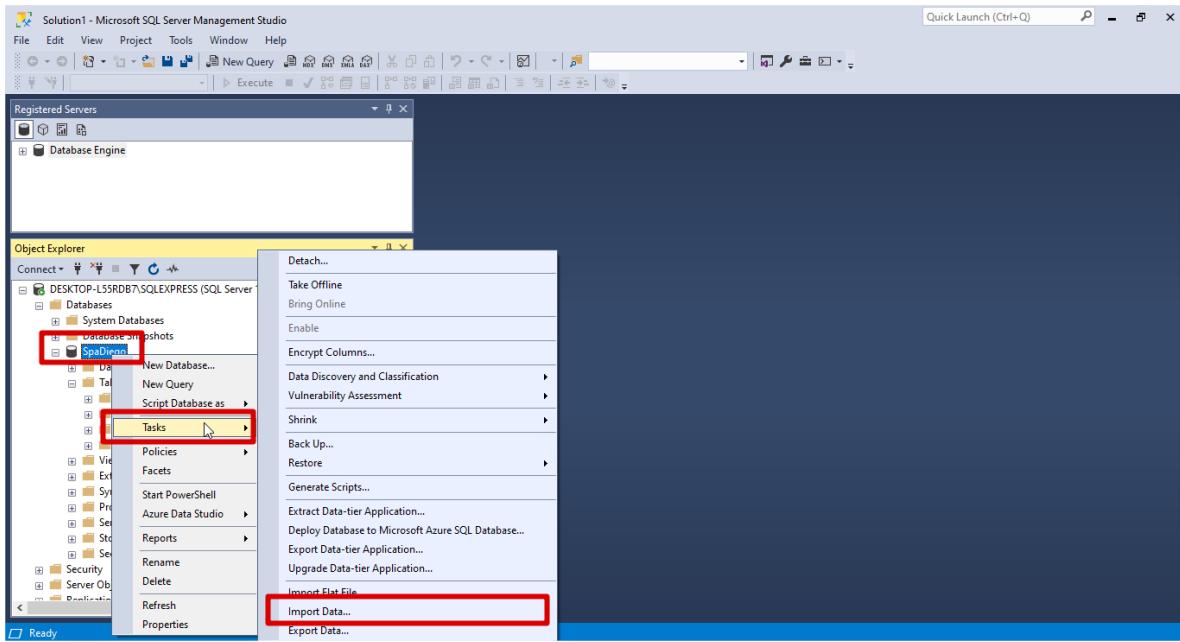
Object Explorer

Connect | New Query | Execute | Quick Launch (Ctrl+Q)

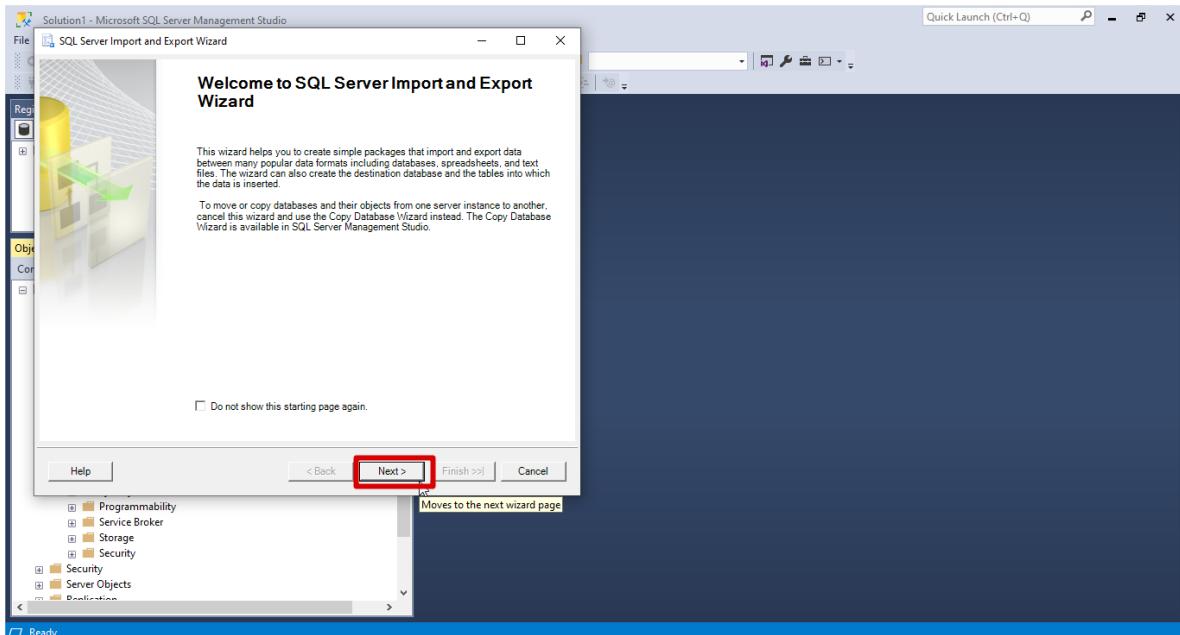
DESKTOP-L55RDB7\SQLEXPRESS (SQL Server 15.0.2000 - DESKTOP-L55RDB7\pat)

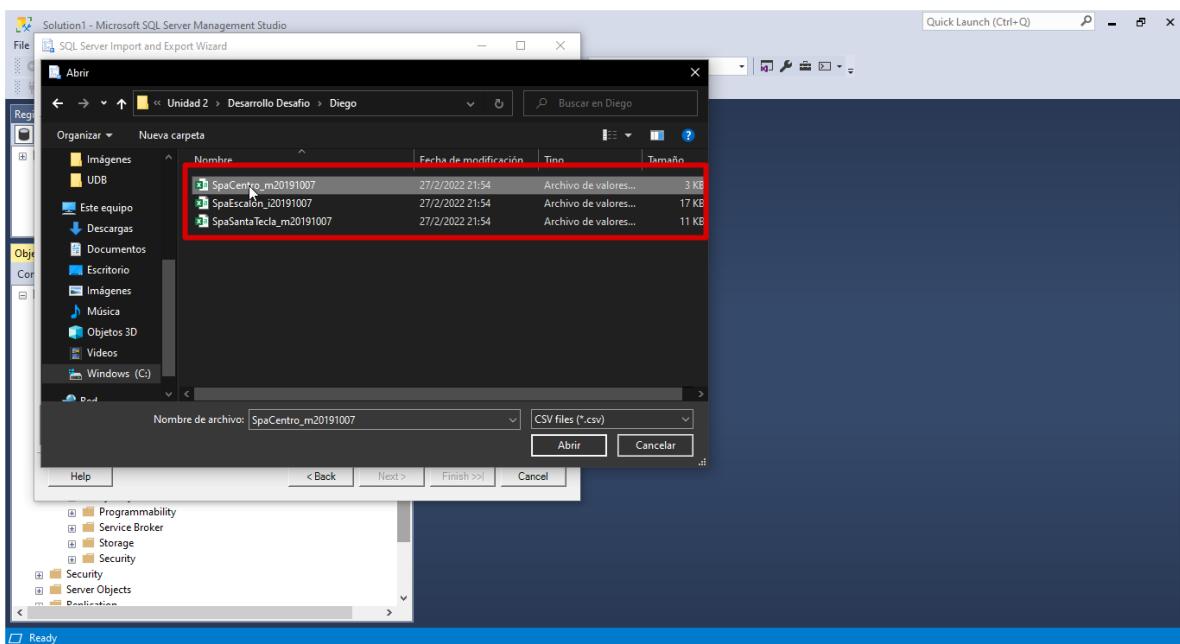
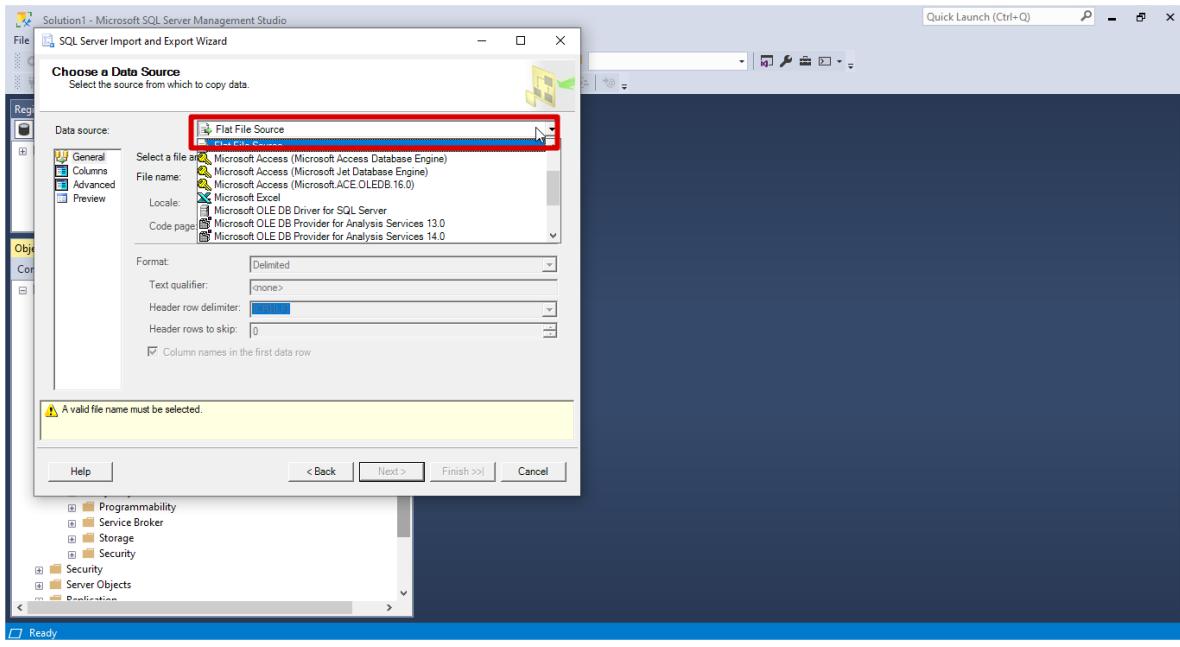
- Databases (highlighted with a red box)
- System databases
- Security
- Server Objects
- Replication
- PolyBase
- Management
- XEvent Profiler

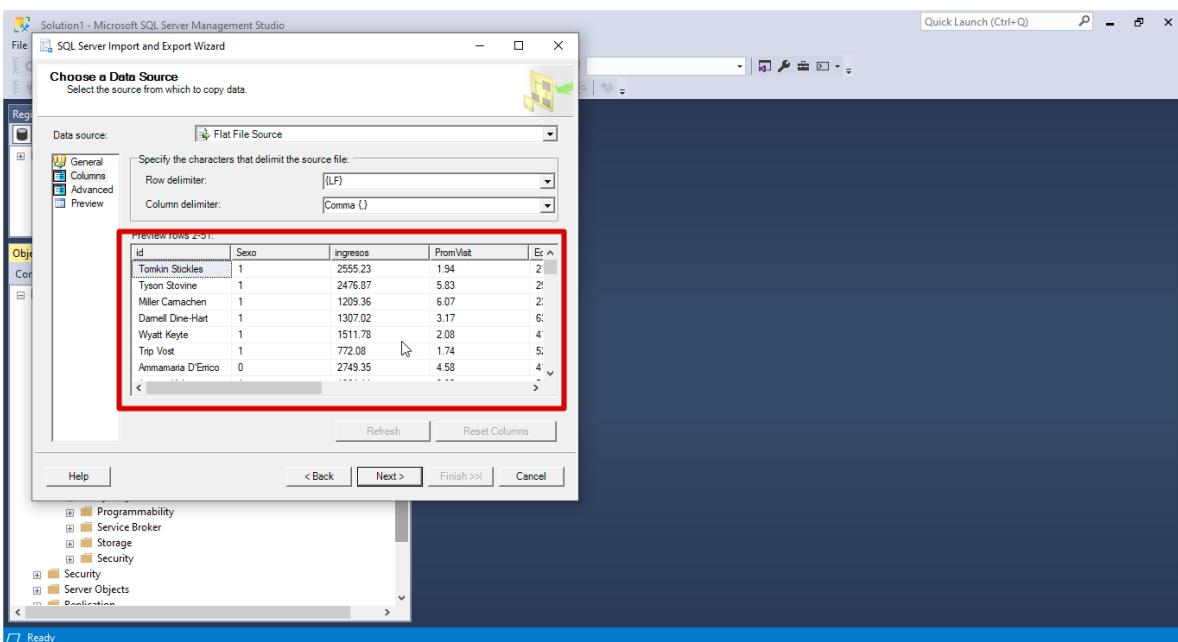
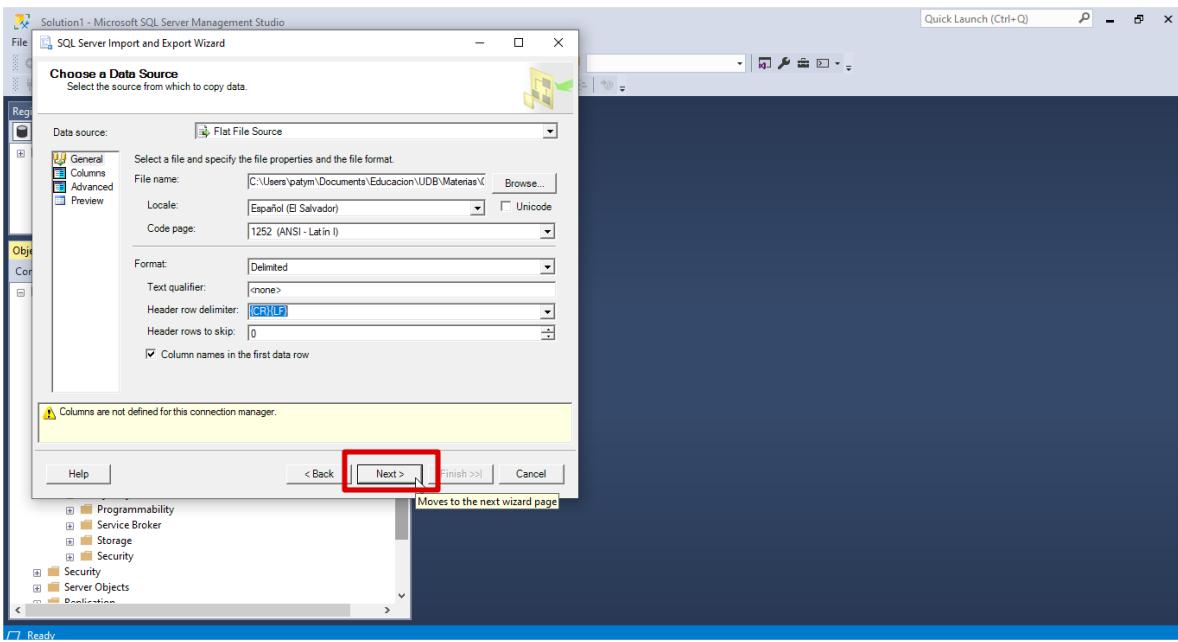


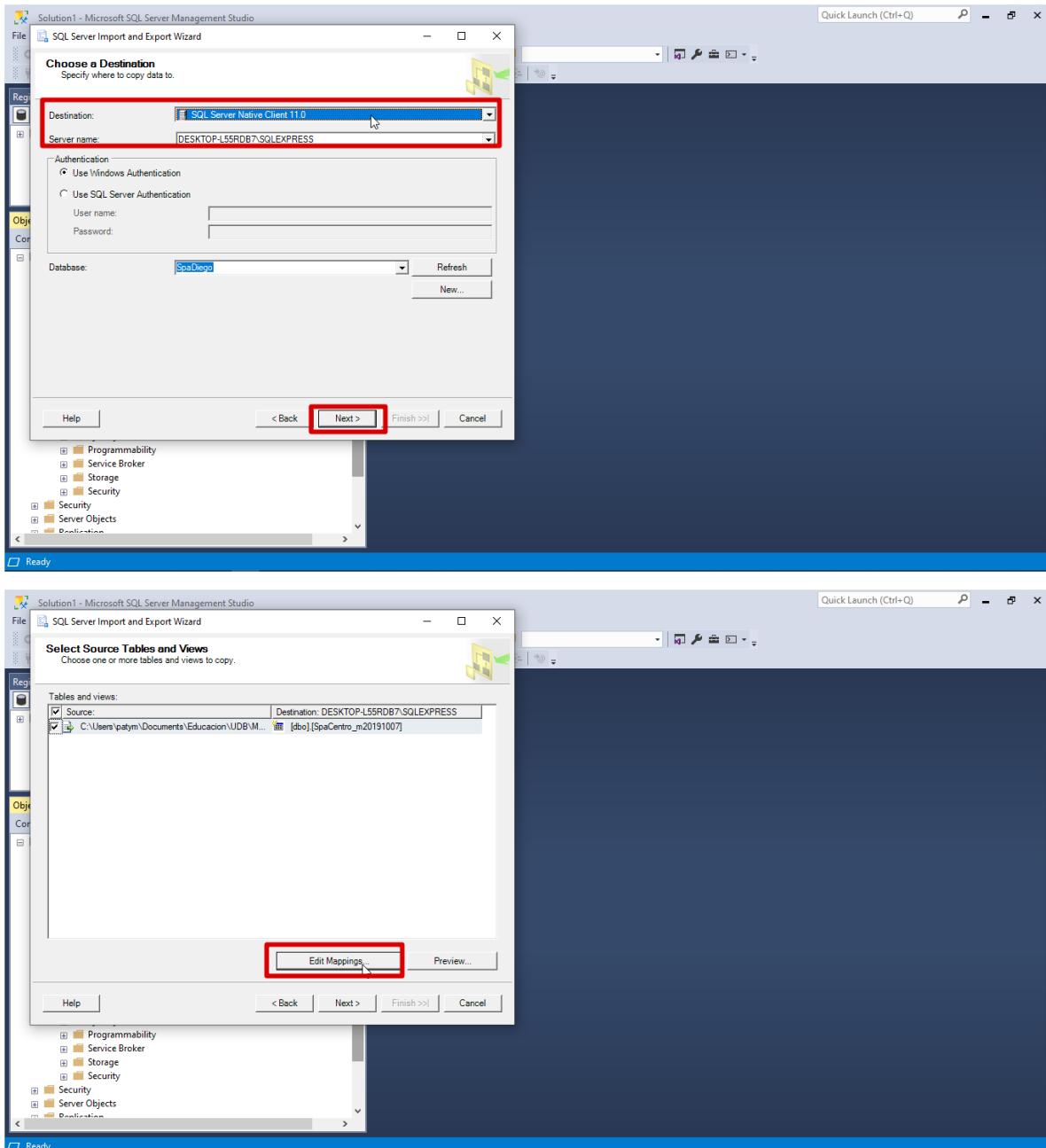


3. Se realiza la importación de las tres tablas que corresponderán a las sucursales en el esquema recien creado.

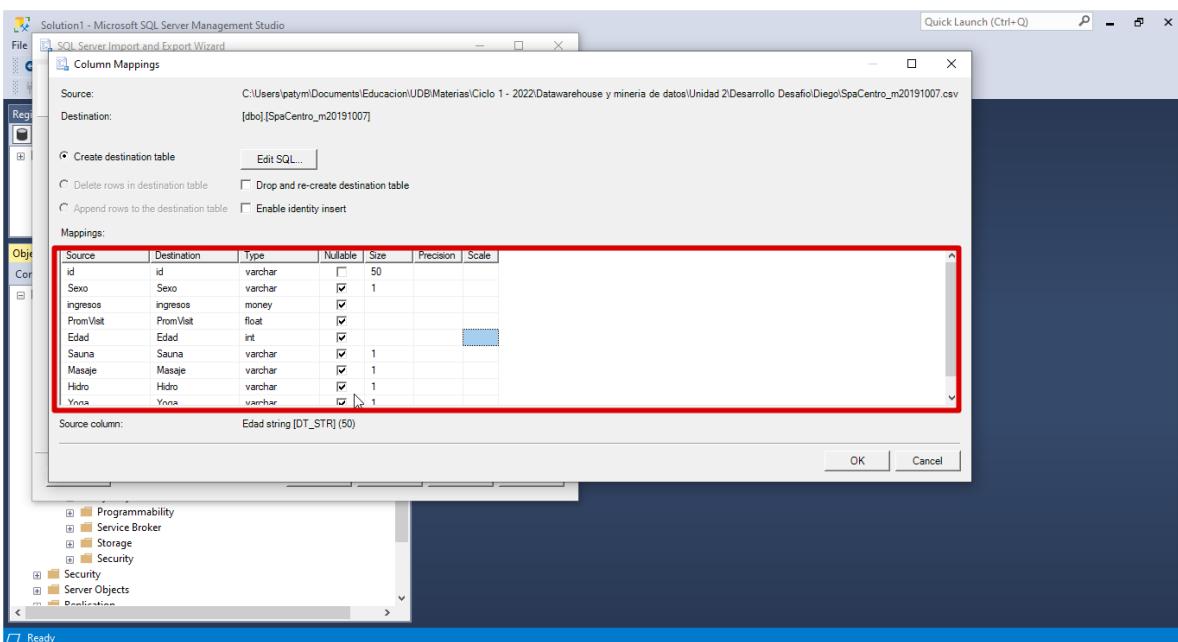
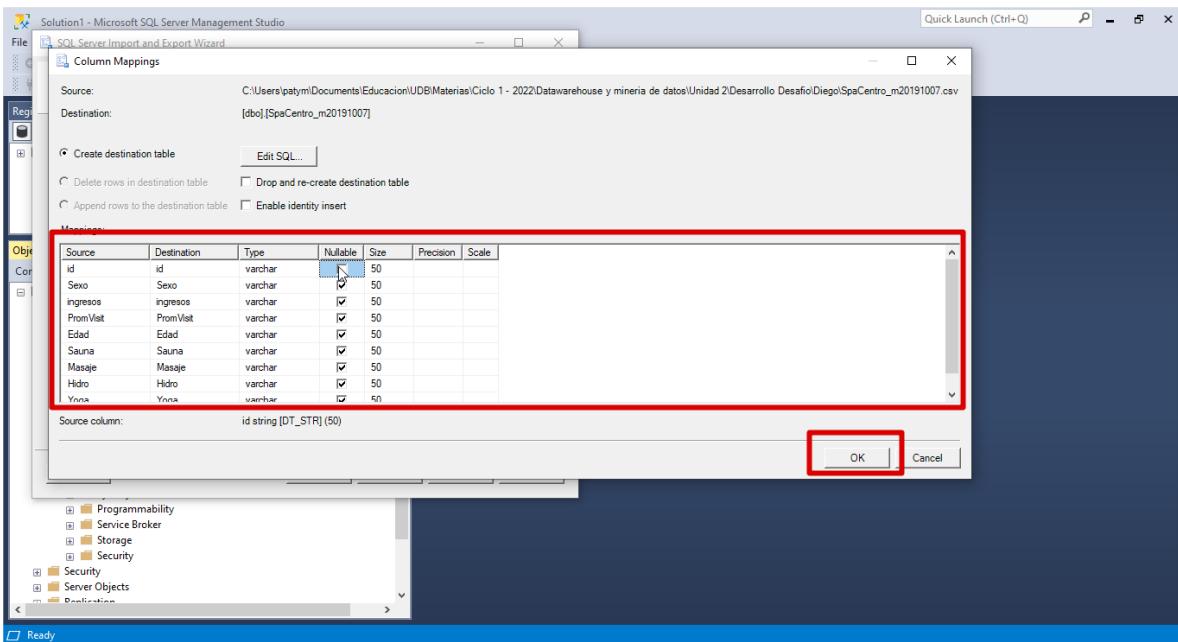




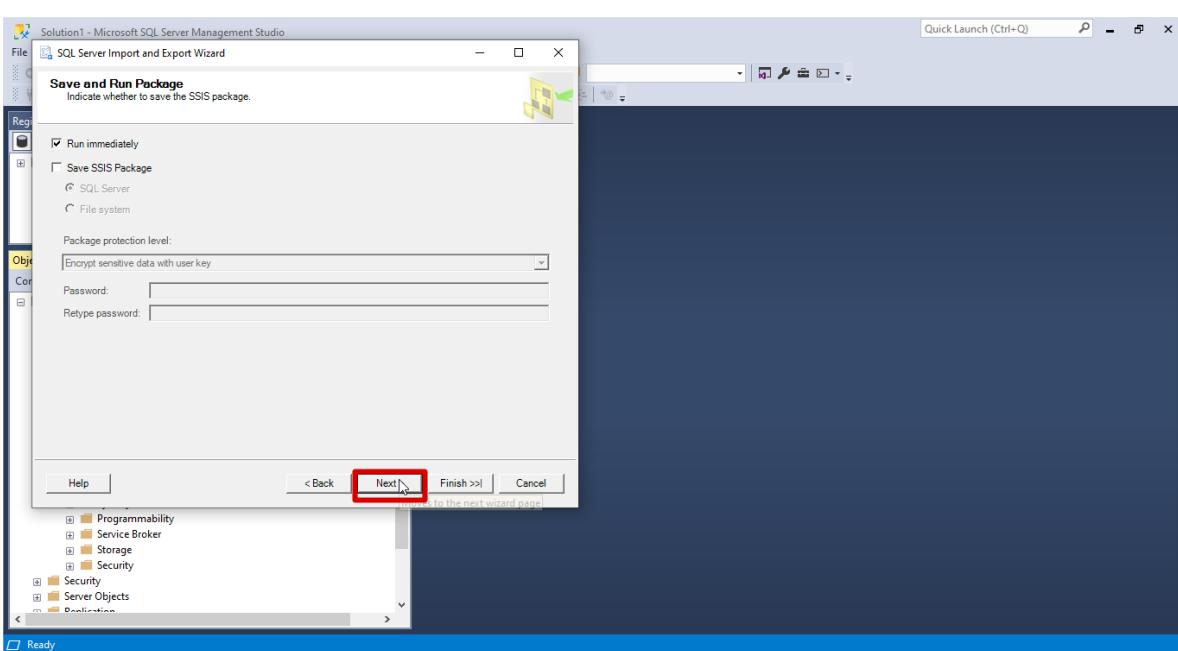
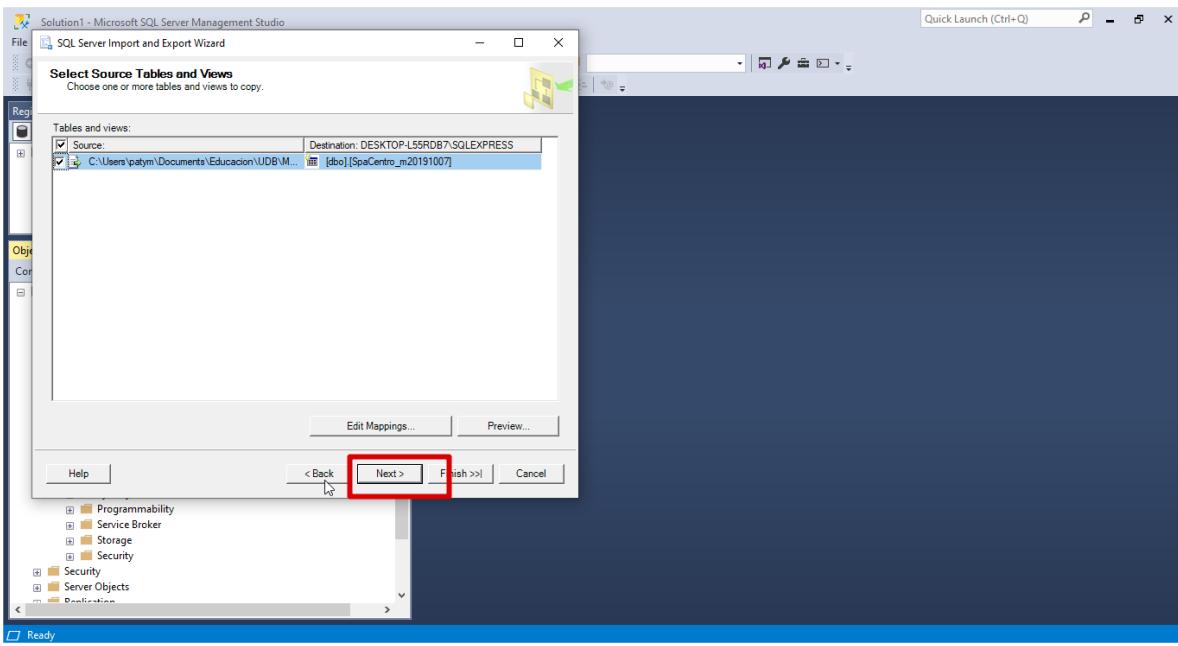


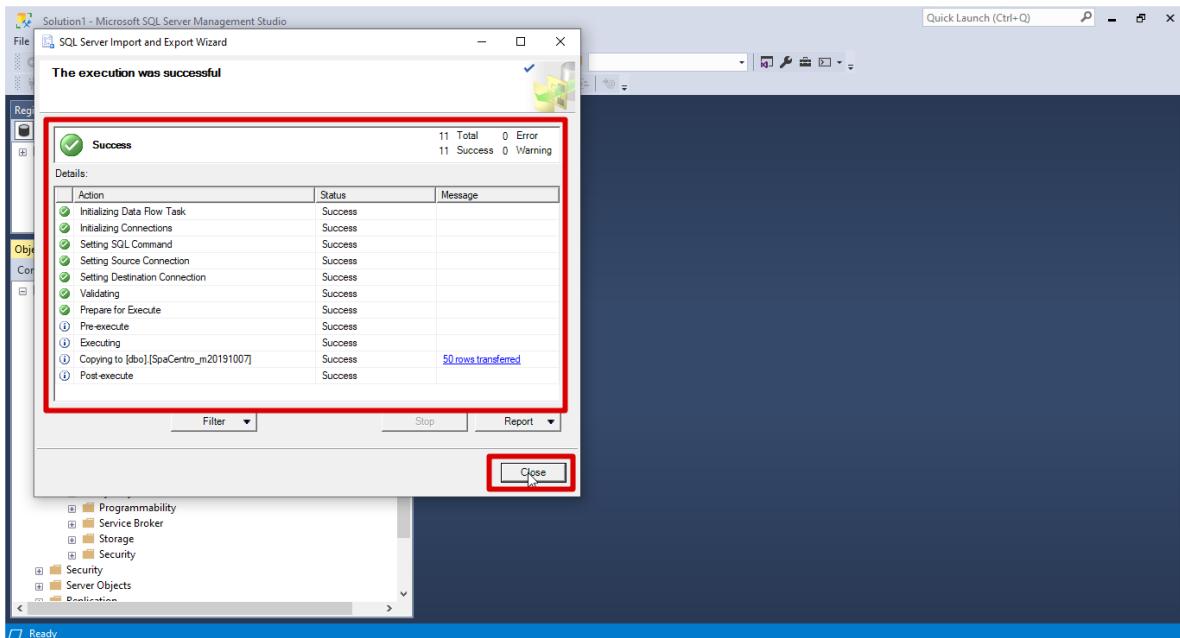
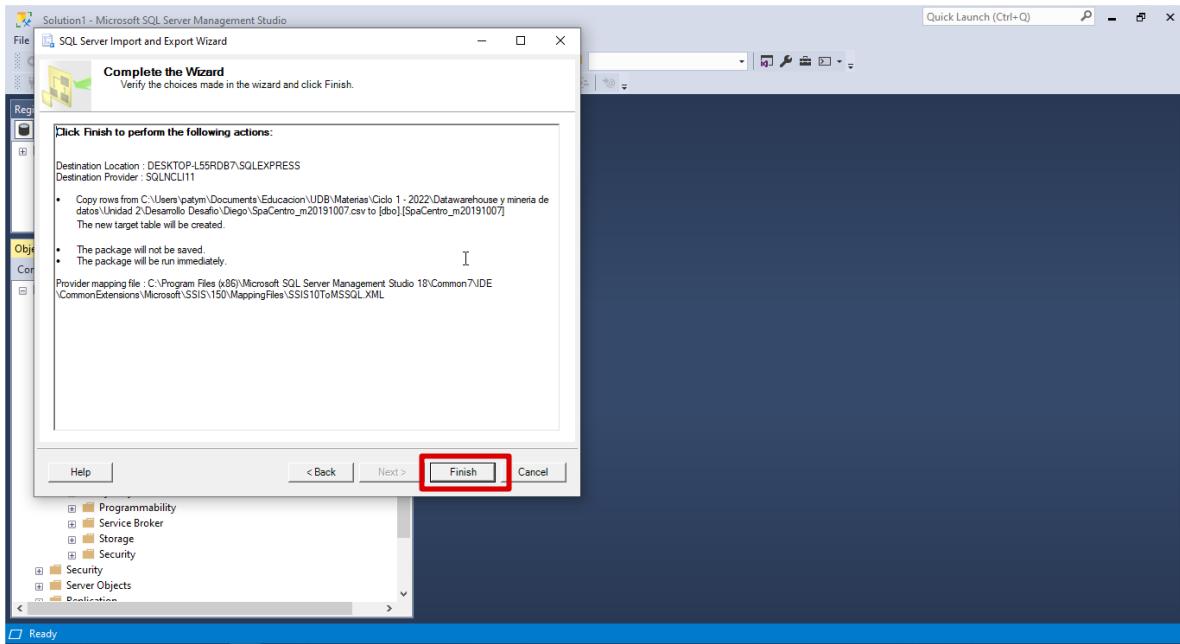


4. Se hace el mapping de los campos de las tablas para asignar los tipos de datos que correspondan según la información de cada columna.



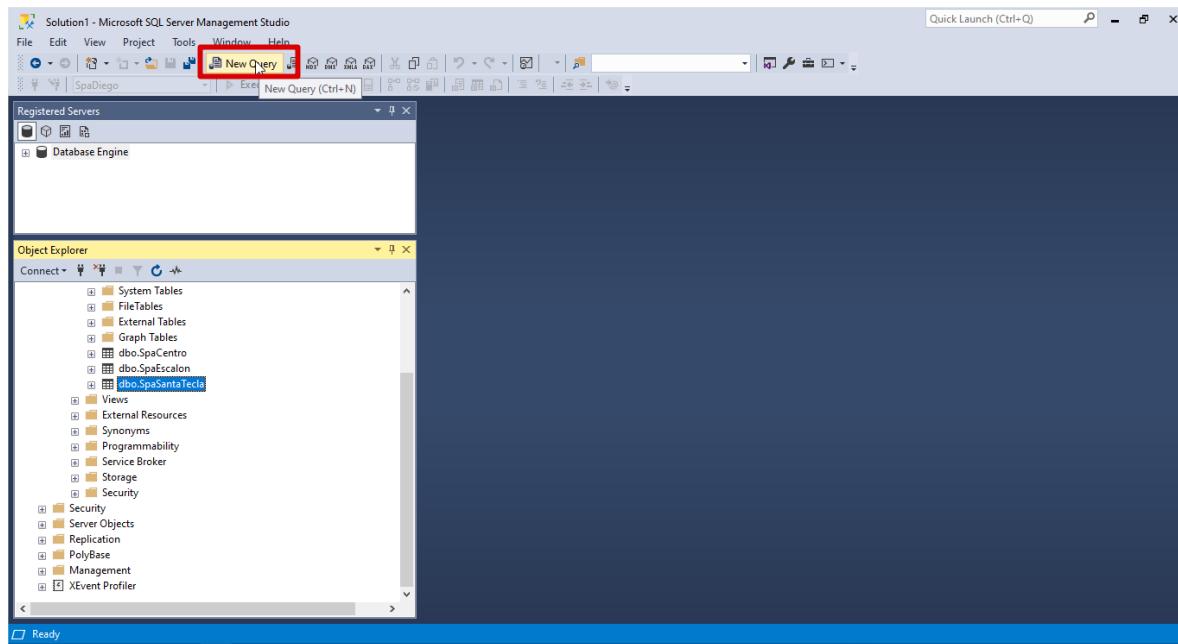
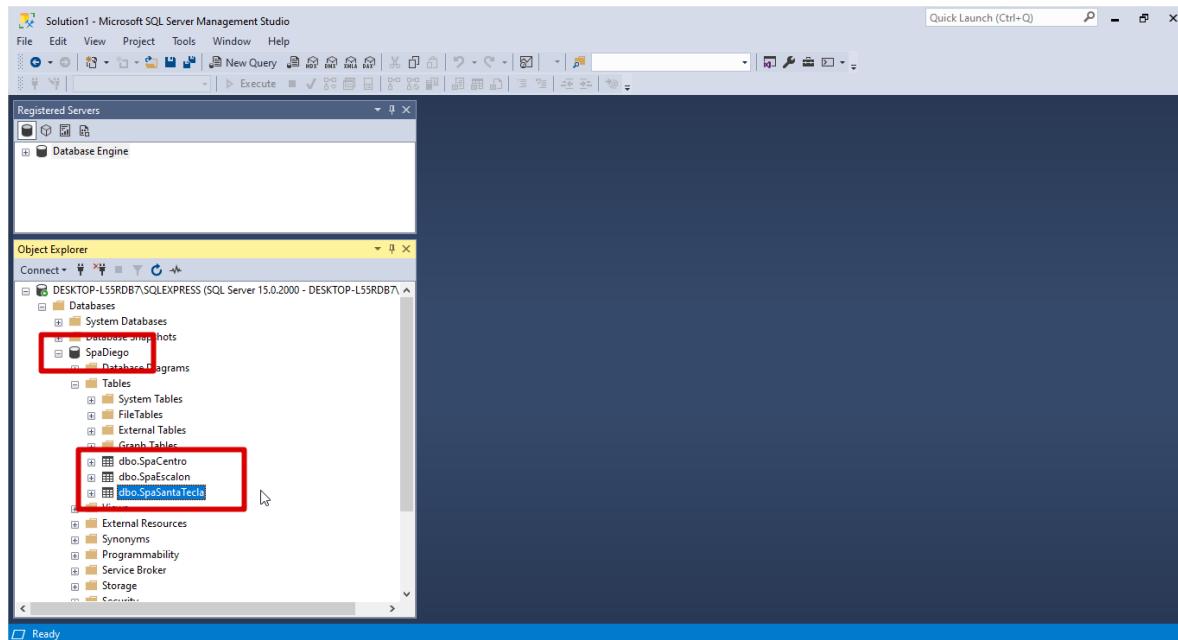
5. Se finaliza el proceso de importación.

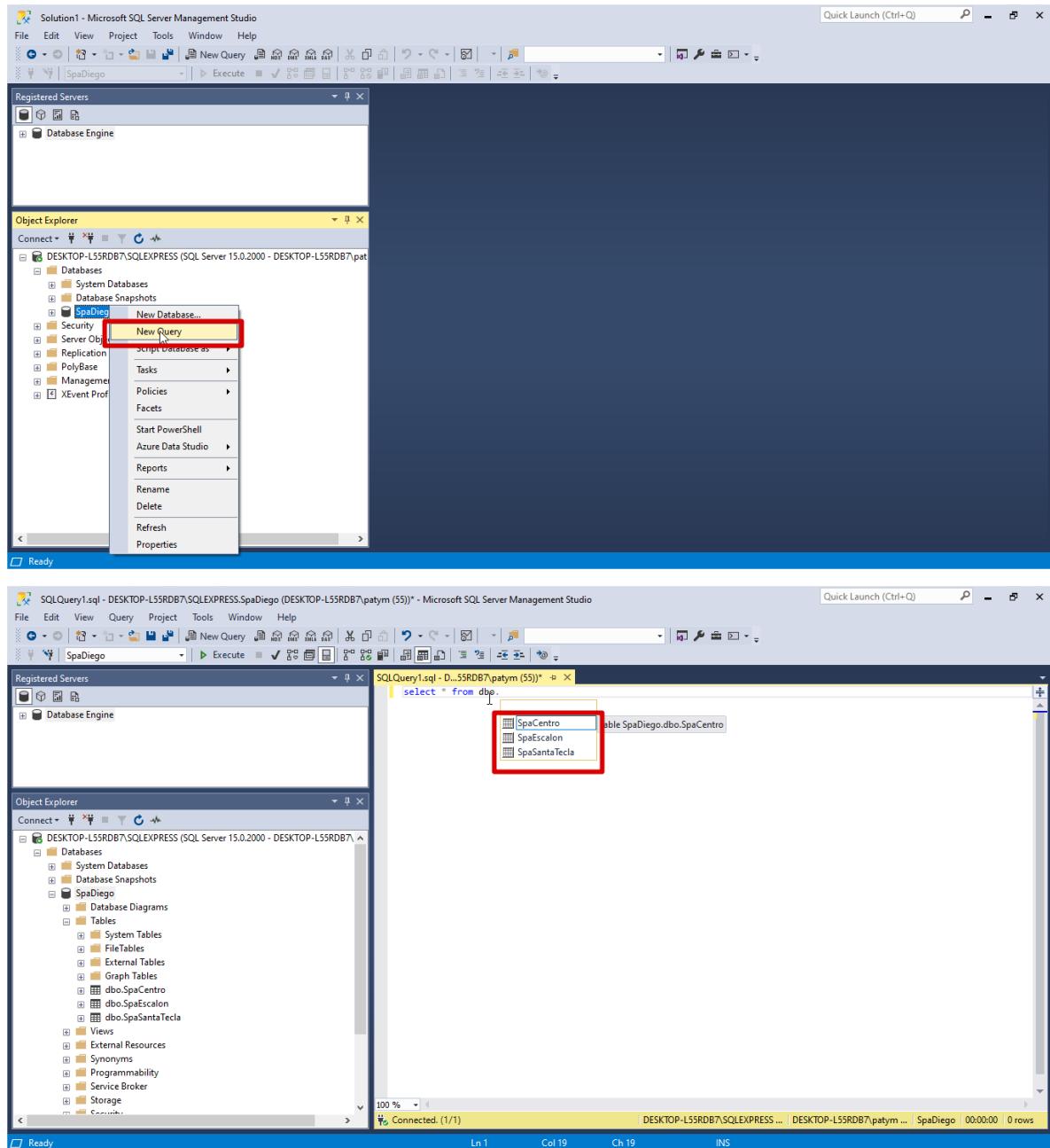




Observación: Se repiten los pasos anteriores para cada sucursal.

6. Se realiza la consulta de cada tabla para validar que todos los campos hayan sido cargados exitosamente.





SQLQuery1.sql - DESKTOP-L55RDB7\SQLEXPRESS.SpaDiego (DESKTOP-L55RDB7\patym (55)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

SpaDiego - Execute

Registered Servers

Database Engine

Object Explorer

Connect ▾

DESKTOP-L55RDB7\SQLEXPRESS (SQL Server 15.0.2000 - DESKTOP-L55RDB7\patym (55))

- Databases
 - System Databases
 - Database Snapshots
 - SpaDiego
 - Database Diagrams
 - Tables
 - Table
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.SpaCentro
 - dbo.SpaEscalon
 - dbo.SpaSantaTecla
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage

Results Messages

1	Tomkin Stickles	1	2555.23	1.94	21	1	1	0
2	Tyson Stovin	1	2476.87	5.83	29	1	1	0
3	Miler Camachen	1	1209.36	6.07	23	1	0	0
4	Damell Dine-Hart	1	1307.02	3.17	63	1	1	1
5	Wyatt Keyte	1	1511.78	2.08	41	0	0	0
6	Tip Vost	1	772.08	1.74	52	1	1	0
7	Annmaria D'Emico	0	2749.35	4.58	41	0	1	1
8	Jessica Kuhn	1	1964.11	2.3	51	1	1	0
9	Hannet Lindenberg	0	1577.93	2.44	62	1	1	0
10	Marga Kiley	0	1945.16	6.36	25	1	1	0
11	Pebrok Praton	1	1917.15	5.86	37	1	1	0

Query executed successfully.

7. Se realizan las consultas necesarias para poder segmentar la información de los clientes por cada sucursal.

Sucursal Centro

SQLQuery1.sql - D...55RDB7\patym (55)* SQLQuery4.sql - D...55RDB7\patym (52)* SQLQuery2.sql - D...55RDB7\patym (66)*

```

select count(*) as sumatoriaJovenes, sum(ingresos) as Ingresos, sum(promvisit) as Visitas from dbo.SpaCentro where Edad >= 20 and Edad < 30
select count(*) as sumatoriaAdultos, sum(ingresos) as Ingresos, sum(promvisit) as Visitas from dbo.SpaCentro where Edad >= 30 and Edad < 60
select count(*) as sumatoriaTerceraEdad, sum(ingresos) as Ingresos, sum(promvisit) as Visitas from dbo.SpaCentro where Edad >= 60

```

Results Messages

1	sumatoriaJovenes	Ingresos	Visitadas
1	10	20947.26	45.89

1	sumatoriaAdultos	Ingresos	Visitadas
1	33	51276.78	121.39

1	sumatoriaTerceraEdad	Ingresos	Visitadas
1	7	15234.76	29.53

Query executed successfully.

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery1.sql - D...55RDB7\patym (55)*

```
select count(*) as Sexo1 from dbo.SpaCentro where Sexo = 0
select count(*) as Sexo1 from dbo.SpaCentro where Sexo = 1
```

100 %

Results Messages

	Sexo1
1	14

	Sexo1
1	36

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 2 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery4.sql - D...55RDB7\patym (52)*

```
select count(*) as Sauna from dbo.SpaCentro where Sauna = 1
select count(*) as Masaje from dbo.SpaCentro where Masaje = 1
select count(*) as Hidro from dbo.SpaCentro where Hidro = 1
select count(*) as Yoga from dbo.SpaCentro where Yoga = 1
```

100 %

Results Messages

	Sauna
1	39

	Masaje
1	42

	Hidro
1	17

	Yoga
1	14

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery4.sql - D...55RDB7\patym (52)*

```

select count(*) as Sauna from dbo.SpaCentro where Sauna = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Masaje from dbo.SpaCentro where Masaje = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Hidro from dbo.SpaCentro where Hidro = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Yoga from dbo.SpaCentro where Yoga = 1 and (Edad >= 30 and Edad < 60)

```

Results Messages

	Sauna
1	25

	Masaje
1	28

	Hidro
1	11

	Yoga
1	9

Query executed successfully. DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

Sucursal Escalon

SQLQuery1.sql - D...55RDB7\patym (55)* SQLQuery4.sql - D...55RDB7\patym (52)* SQLQuery2.sql - D...55RDB7\patym (66)*

```

select count(*) as sumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >= 20 and Edad < 30
select count(*) as sumatoriaAdultos, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >= 30 and Edad < 60
select count(*) as sumatoriaTerceraEdad, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >= 60

```

Results Messages

	sumatoriaJovenes	Ingresos	Visitas
1	75	114643.65	277.21

	sumatoriaAdultos	Ingresos	Visitas
1	277	485823.61	1113.64

	sumatoriaTerceraEdad	Ingresos	Visitas
1	48	80222.56	192.84

Query executed successfully. DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 3 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery1.sql - D...55RDB7\patym (55)*

```
select count(*) as Sexo1 from dbo.SpaEscalon where Sexo = 0
select count(*) as Sexo1 from dbo.SpaEscalon where Sexo = 1
```

100 %

Results Messages

	Sexo1
1	187

	Sexo1
1	213

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 2 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery4.sql - D...55RDB7\patym (52)*

```
select count(*) as Sauna from dbo.SpaEscalon where Sauna = 1
select count(*) as Masaje from dbo.SpaEscalon where Masaje = 1
select count(*) as Hidro from dbo.SpaEscalon where Hidro = 1
select count(*) as Yoga from dbo.SpaEscalon where Yoga = 1
```

100 %

Results Messages

	Sauna
1	194

	Masaje
1	200

	Hidro
1	199

	Yoga
1	199

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery4.sql - D...55RDB7\patym (52)*

```

select count(*) as Sauna from dbo.SpaEscalon where Sauna = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Masaje from dbo.SpaEscalon where Masaje = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Hidro from dbo.SpaEscalon where Hidro = 1 and (Edad >= 30 and Edad < 60)
select count(*) as Yoga from dbo.SpaEscalon where Yoga = 1 and (Edad >= 30 and Edad < 60)

```

100 %

Results Messages

Sauna	
1	134
Masaje	
1	131
Hidro	
1	148
Yoga	
1	139

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

Sucursal Santa Tecla

SQLQuery1.sql - D...55RDB7\patym (55)* SQLQuery4.sql - D...55RDB7\patym (66)* SQLQuery2.sql - D...55RDB7\patym (66)*

```

select count(*) as sumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >= 20 and Edad < 30
select count(*) as sumatoriaAdultos, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >= 30 and Edad < 60
select count(*) as sumatoriaTerceraEdad, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >= 60

```

100 %

Results Messages

sumatoriaJovenes	Ingresos	Visitas
1	54	97708.61
		216.58
sumatoriaAdultos	Ingresos	Visitas
1	168	261334.27
		637.36
sumatoriaTerceraEdad	Ingresos	Visitas
1	28	48648.93
		104.13

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 3 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery1.sql - D...55RDB7\patym (55)*

```
select count(*) as Sexo1 from dbo.SpaSantaTecla where Sexo = 0
select count(*) as Sexo1 from dbo.SpaSantaTecla where Sexo = 1
```

100 %

Results Messages

	Sexo1
1	195

	Sexo1
1	55

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 2 rows

SQLQuery3.sql - D...55RDB7\patym (59)* SQLQuery2.sql - D...55RDB7\patym (66)* SQLQuery4.sql - D...55RDB7\patym (52)*

```
select count(*) as Sauna from dbo.SpaSantaTecla where Sauna = 1
select count(*) as Masaje from dbo.SpaSantaTecla where Masaje = 1
select count(*) as Hidro from dbo.SpaSantaTecla where Hidro = 1
select count(*) as Yoga from dbo.SpaSantaTecla where Yoga = 1
```

100 %

Results Messages

	Sauna
1	51

	Masaje
1	124

	Hidro
1	55

	Yoga
1	148

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

The screenshot shows the SQL Server Management Studio interface with four tabs open:

- SQLQuery3.sql - D...55RDB7\patym (59)***: Contains the query: `select count(*) as Sauna from dbo.SpaSantaTecla where Sauna = 1 and (Edad >= 30 and Edad < 60)`
- SQLQuery2.sql - D...55RDB7\patym (66)***: Contains the query: `select count(*) as Masaje from dbo.SpaSantaTecla where Masaje = 1 and (Edad >= 30 and Edad < 60)`
- SQLQuery4.sql - D...55RDB7\patym (52)***: Contains the query: `select count(*) as Hidro from dbo.SpaSantaTecla where Hidro = 1 and (Edad >= 30 and Edad < 60)`
- SQLQuery4.sql - D...55RDB7\patym (52)***: Contains the query: `select count(*) as Yoga from dbo.SpaSantaTecla where Yoga = 1 and (Edad >= 30 and Edad < 60)`

The results grid displays the following data:

Sauna	36
Masaje	93
Hidro	36
Yoga	89

At the bottom of the interface, a message bar indicates: **Query executed successfully.** | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | SpaDiego | 00:00:00 | 4 rows

8. Con la información filtrada en las consultas SQL, se procede al análisis de los datos.

Según las consultas obtenidas se pueden determinar los siguientes grupos:

Filtro	Grupo	Características
POR EDAD	Clientes adultos jóvenes	Personas entre 20 y 29 años
	Clientes adultos	Personas entre los 30 y 59 años
	Clientes adultos mayores	Personas mayores de 60 años
POR SEXO	Mujeres u hombres	No se puede determinar este grupo, pues según se observó en las consultas generales y al no tener una indicación del significado de 0 y 1, se pueden encontrar personas con nombres femeninos en ambos grupos. El mismo

		caso aplica con nombres de tipo masculino.
--	--	--

Según las edades:

Sucursal	Grupo por edad	Cantidad	Ingresos	Prom. Visitas
Centro	Adultos jóvenes	10	20,947.26	45.89
	Adultos	33	51,276.78	121.39
	Adultos mayores	7	15,234.76	29.53
TOTAL		50	87,458.80	196.81
Escalón	Adultos jóvenes	75	114,643.65	277.21
	Adultos	277	485,823.61	1113.64
	Adultos mayores	48	80,222.56	192.84
TOTAL		400	680,689.82	1,583.69
Santa Tecla	Adultos jóvenes	54	97,708.61	216.58
	Adultos	168	261,334.27	637.36
	Adultos mayores	28	48,648.93	104.13
TOTAL		250	407,691.81	958.07

Como se puede observar en la tabla anterior, los clientes que mas frecuentan las tres sucursales, tienen en común el hecho de que son personas adultas entre los 30 y 59 años, considerados para este análisis como “adultos”.

En segundo lugar los adultos jóvenes y finalmente personas de la tercera edad.

De igual forma, estos números van directamente relacionados a los ingresos que estos representan, y a la frecuencia de las visitas.

Tambien se puede observar que la sucursal que más clientes, ingresos y visitas registra es la Sucursal Escalón.

Según los servicios frecuentados:

Enfocados exclusivamente en el grupo de personas que más frequentan el Spa (determinadas anteriormente), se buscan los servicios que más consumen.

Sucursal	Servicios solicitados por grupo mayoritario	Cantidad
Centro	Sauna	25
	Masaje	28
	Hidro	11
	Yoga	9
Escalón	Sauna	134
	Masaje	131
	Hidro	148
	Yoga	139
Santa Tecla	Sauna	36
	Masaje	93
	Hidro	36
	Yoga	89

Como se puede observar, en cuanto a los servicios si existen diferencias, pues la Sucursal Centro y Santa Tecla, para su grupo de clientes más frecuentes brinda más servicios de Masaje, mientras que en la Sucursal Escalón el servicio más solicitado es Hidro.

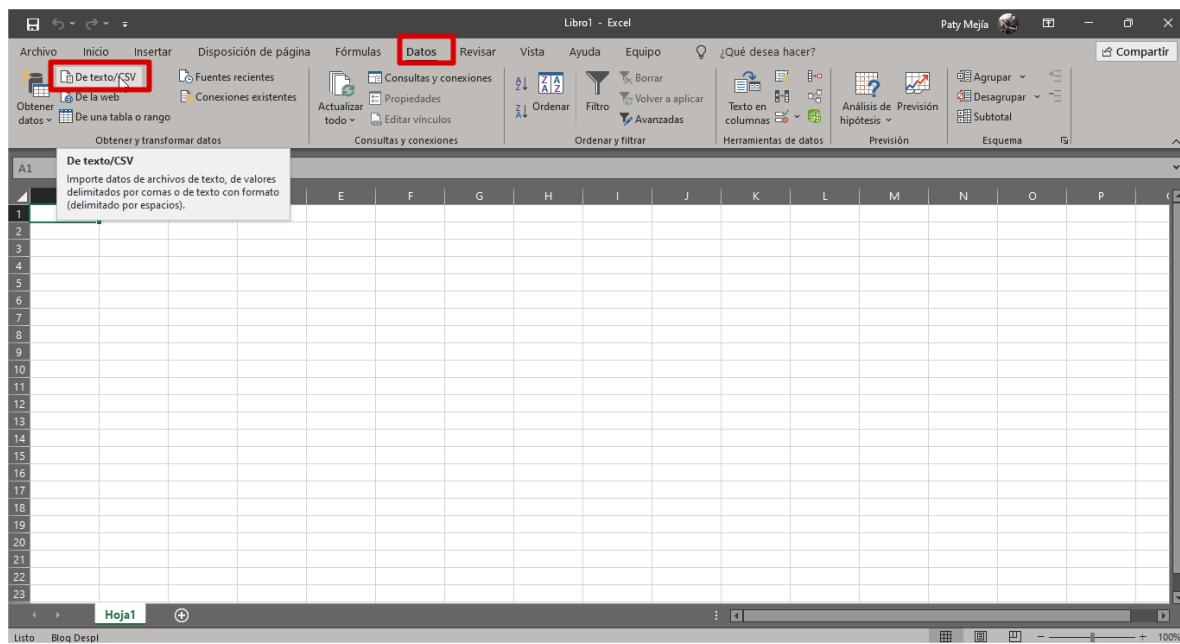
Ejercicio 2.

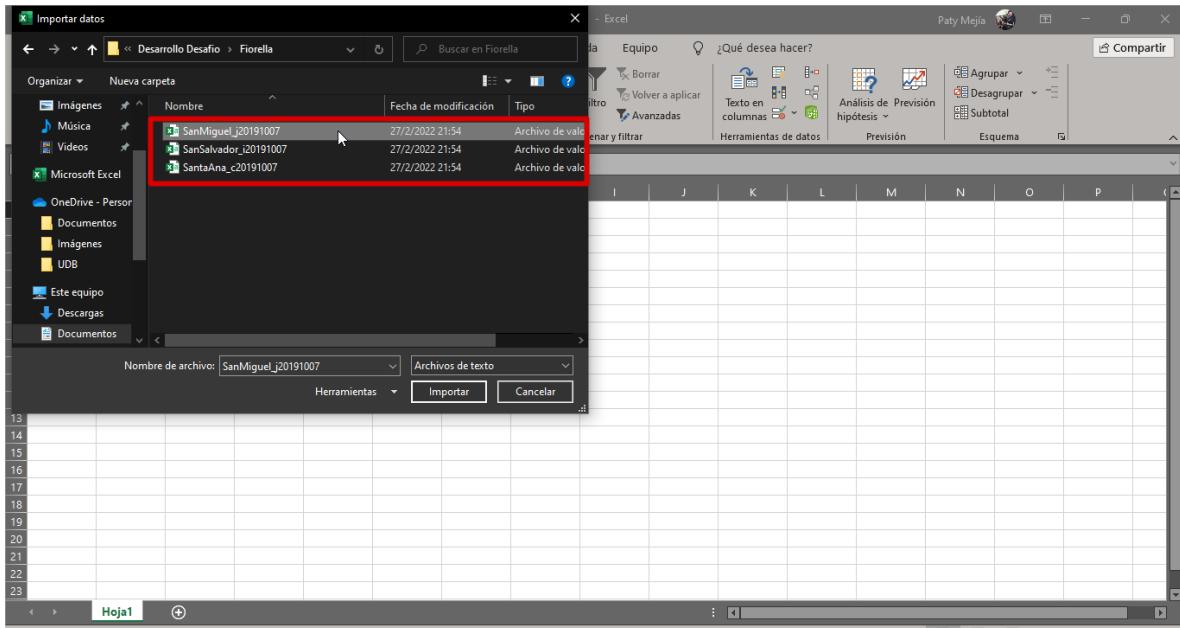
La Floristería "Fiorella" quiere saber cómo se compran sus productos, y tiene la data de tres departamentos del país, por lo cual les pide su opinión sobre qué productos sobresalen, que combinaciones son mejores y quieren este estudio por departamento y también por país.

Porcentaje alcanzado: 100%

Procedimiento:

1. Se revisa la información de los tres archivos recibidos para validar que la información coincida o de ser necesario realizar las respectivas correcciones previas a la carga en la BD.





The screenshot shows the Power Query Editor with a table titled 'SanMiguel_j20191007'. The table has 300 rows and 15 columns. The first few rows of data are:

	A ² Id	1 ² Rosas	1 ² Claveles	1 ² Macetas	1 ² Tierra	1 ² Girasoles	1 ² Hortensia	1 ² Globos
1	Egon Greenhead	1	0	0	0	1	1	
2	Elita Borles	1	0	0	0	1	1	
3	Kingsly Yerrell	1	1	0	0	1	1	
4	Graeme Donson	1	0	1	1	0	0	
5	Wini McIury	1	1	0	0	1	1	
6	Abigail Hallagan	1	1	0	1	0	0	
7	Elidon Parrett	0	1	0	0	0	0	
8	Bernelle Cohrs	0	0	1	0	1	1	
9	Cordelle Beconsall	0	0	0	0	0	1	
10	Jody Mewrcik	0	1	1	1	0	1	
11	Gill Aisbett	1	1	1	0	0	1	
12	Jarrao Bayle	0	1	0	0	1	0	
13	Carolin Oxer	1	1	0	1	0	0	
14	Alain Dostley	1	1	0	1	1	0	
15	Kelly Bohman	1	1	0	0	1	0	
16	Didi Agnew	1	0	0	1	1	0	
17	Culver Simkins	1	1	1	0	1	0	
18	Lenka Jouwelt	1	0	1	0	1	0	
19	Rochell Pitson	1	1	0	0	0	0	
20	Laurie Harle	0	0	0	0	0	1	
21	Cassandra Emmins	0	0	0	0	0	1	
22	Sharleen Delbergue	0	0	1	1	1	1	
23	Landon Anstiss	0	0	1	0	1	0	
24	Daneus Ferrence	1	0	1	1	0	1	

VISTA PREVIA DESCARGADA A LAS 18:00

X | ☺ | SanSalvador_i20191007 - Editor de Power Query

Archivo Inicio Transformar Agregar columna Vista

Cerrar y cargar Actualizar vista previa Consulta Propiedades Editor avanzado Administrar Consultas Combinar consultas Usar la primera fila como encabezado Combinar consultas Anexar consultas Combinar archivos Administrar parámetros Configuración de origen de datos Nueva consulta

Consultas [1] = Table.TransformColumnTypes(#"Encabezados promovidos",{{"id", type text}, {"Rosas", Int64.Type}, {"Claveles", Int64.Type}, {"Macetas", Int64.Type}, {"Tierra", Int64.Type}, {"Girasoles", Int64.Type}, {"Hortensia", Int64.Type}, {"Globos", Int64.Type}}

SanSalvador_i20191007

A ¹ C id	Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos
1 Loren Pritty	1	0	1	1	0	0	0
2 Curran Luckey	1	1	1	1	0	0	0
3 Marietta Luff	1	1	0	1	0	0	0
4 Codi Finnemore	1	0	1	0	0	1	0
5 Keane McMains	1	0	0	1	0	0	0
6 Markus Furzland	1	1	0	0	0	1	1
7 Davide Paulou	0	0	0	1	1	1	1
8 Valentine Giotto	1	0	1	1	0	0	0
9 Atlanta O'Hagirtie	1	0	0	1	0	0	0
10 Roze Cratchley	1	0	1	0	1	1	1
11 Millicent Bewsey	1	0	1	0	1	1	1
12 Missy Galbreth	1	1	1	1	1	0	0
13 Opal Stopper	1	1	1	1	1	0	0
14 Dot Justin	0	1	0	0	0	0	1
15 Darbee Slyvester	1	0	1	0	0	0	0
16 Roseann Kipping	1	0	1	1	1	0	0
17 Rudd Saylor	1	1	0	0	0	0	0
18 Rebe Harms	1	1	0	1	1	1	1
19 Kylynn Tampling	0	1	0	1	0	0	0
20 Analiese Panks	1	1	1	1	0	0	0
21 Trstram Pembie	1	1	0	0	0	0	0
22 Dallon Oiner	1	0	0	1	1	0	0
23 Brigitta Ostridge	1	0	1	0	1	1	1
24 Garsenf Whinhalav	0	1	0	1	1	0	0

15 COLUMNAS, 750 FILAS

VISTA PREVIA DESCARGADA A LAS 18:01

X | ☺ | SantaAna_c20191007 - Editor de Power Query

Archivo Inicio Transformar Agregar columna Vista

Cerrar y cargar Actualizar vista previa Consulta Propiedades Editor avanzado Administrar Consultas Combinar consultas Usar la primera fila como encabezado Combinar consultas Anexar consultas Combinar archivos Administrar parámetros Configuración de origen de datos Origenes de datos Nueva consulta

Consultas [1] = Table.TransformColumnTypes(#"Encabezados promovidos",{{"id", type text}, {"Rosas", Int64.Type}, {"Claveles", Int64.Type}, {"Macetas", Int64.Type}, {"Tierra", Int64.Type}, {"Girasoles", Int64.Type}, {"Hortensia", Int64.Type}, {"Globos", Int64.Type}}

SantaAna_c20191007

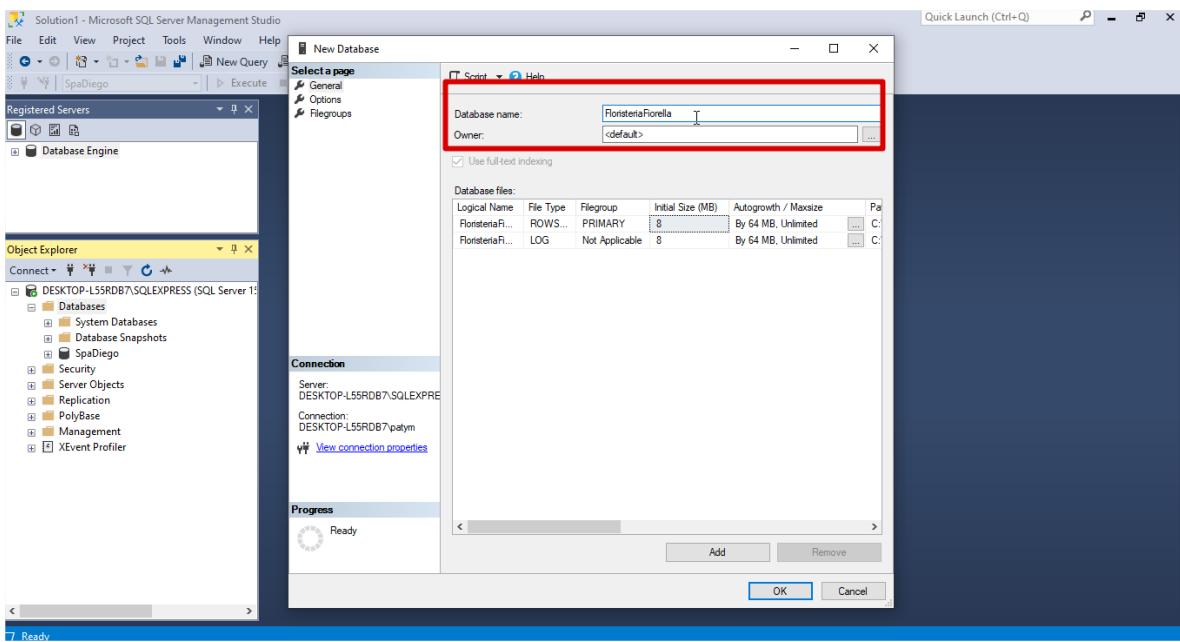
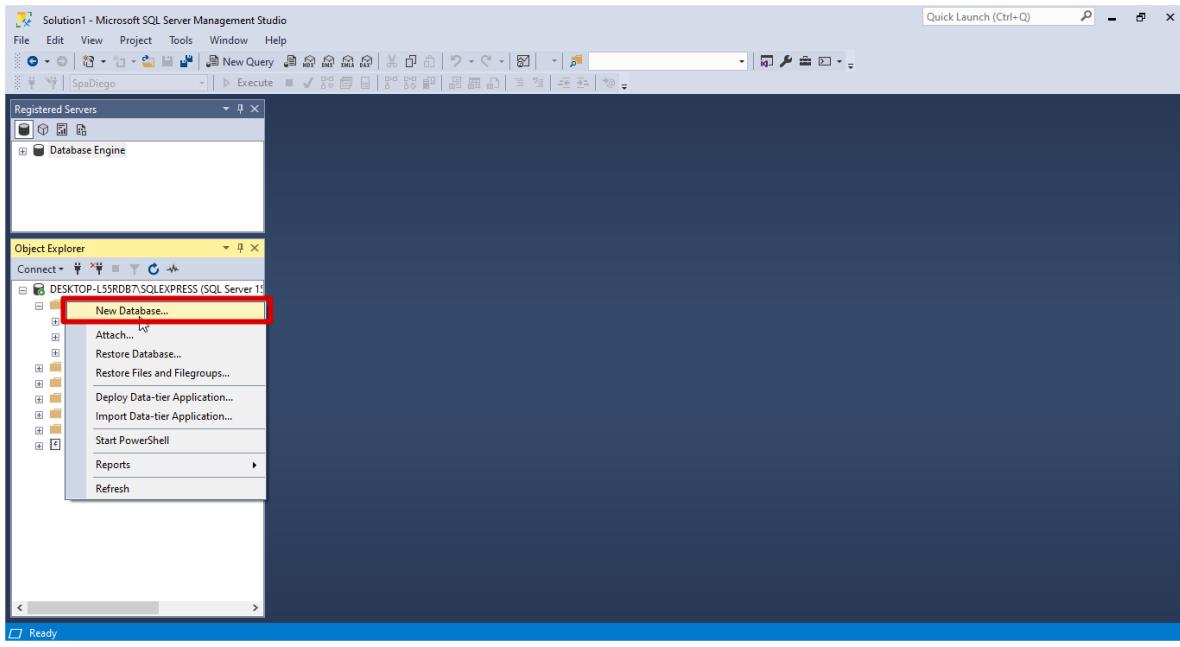
A ¹ C id	Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos
1 Blake Farrell	0	0	1	0	1	1	1
2 Guendolen Hundey	0	0	0	0	1	0	0
3 Georgiana Turnell	0	1	0	0	1	1	1
4 Giorgi McCullen	1	0	0	1	1	1	1
5 Ole Broadbere	1	0	0	0	0	0	0
6 Lerol Timny	1	1	1	0	1	1	1
7 Karlene Meller	0	1	1	1	0	1	1
8 Raquela Oda	1	1	0	0	1	0	0
9 Merci Ruppelin	0	0	1	1	0	0	0
10 Jacky Drutt	0	1	0	0	1	0	0
11 Sarena Pettwood	0	0	1	1	0	1	1
12 Davita Whetnell	0	0	0	0	0	0	0
13 Faythe McComb	1	1	1	0	0	0	0
14 Cleopatra Bourton	0	0	1	1	1	0	0
15 Heda Camm	0	0	0	1	1	1	1
16 Zita Pacey	0	0	1	0	1	1	0
17 Sky Mannie	0	1	0	0	1	0	0
18 Alexi Gulliver	1	1	1	0	0	0	0
19 Pearline Jirsa	0	1	1	0	0	0	0
20 Chas Kubis	1	0	1	1	1	1	1
21 Karalynn Brownhill	1	1	1	1	0	0	0
22 Nicols Illing	0	1	1	0	0	1	1
23 Spenser Jeffs	0	1	0	0	1	1	1
24 Raribraha MarCumeeckev	1	1	1	0	1	1	1

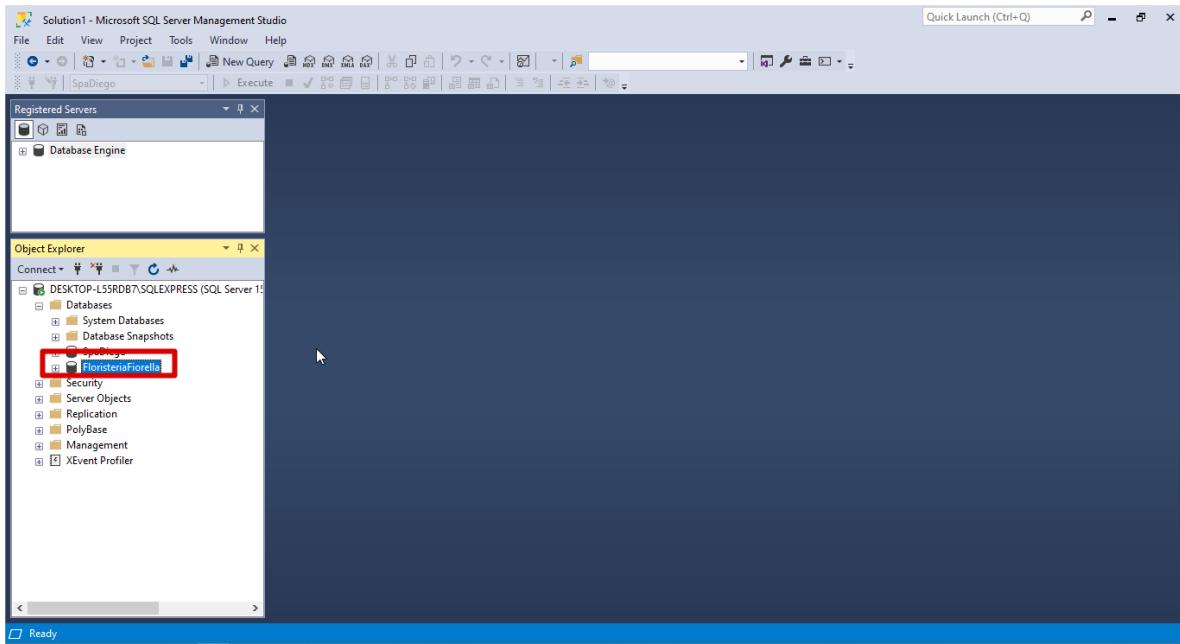
15 COLUMNAS, 500 FILAS

VISTA PREVIA DESCARGADA A LAS 18:02

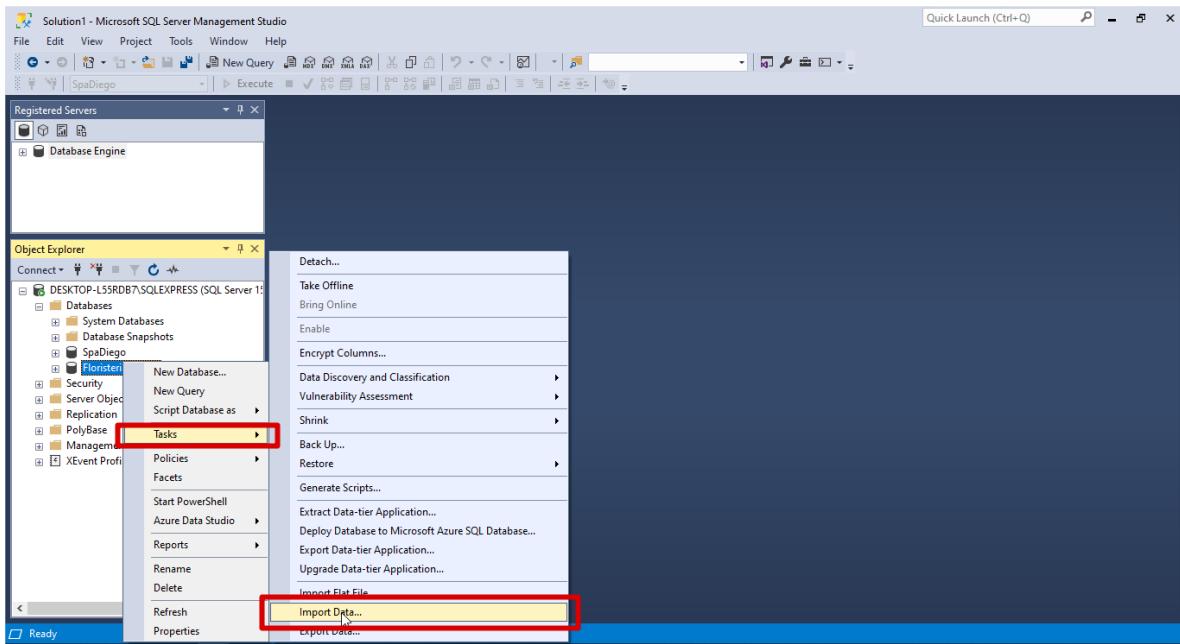
Observación: Se puede observar que los datos están en el mismo formato para los registros de los tres archivo CSV.

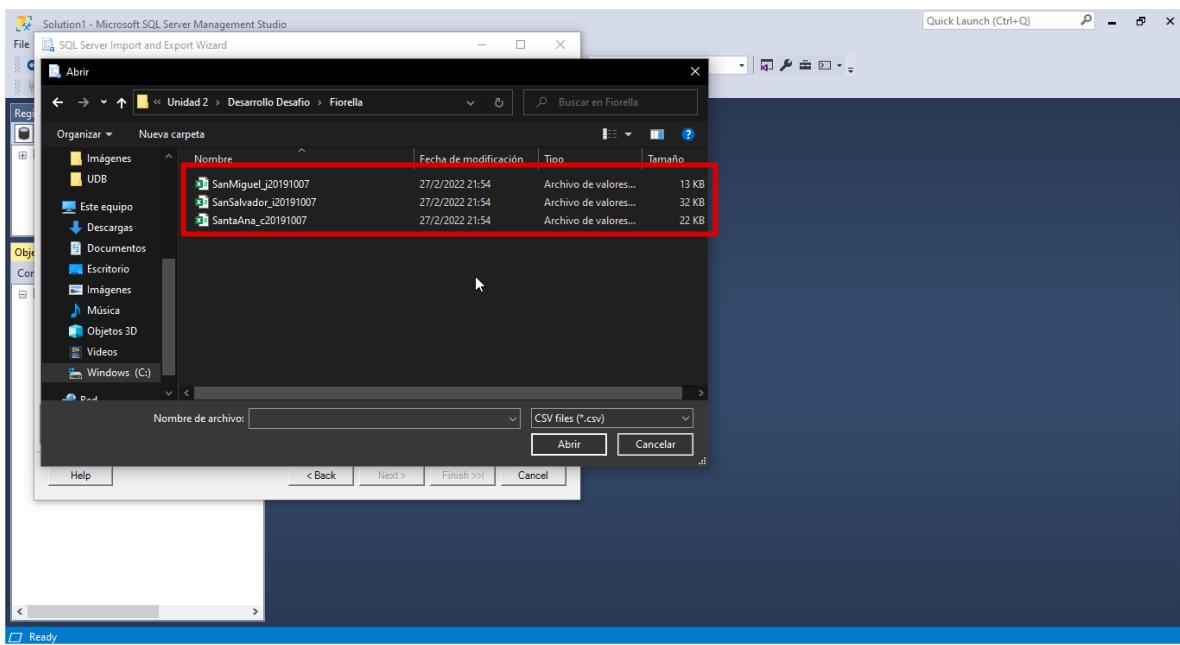
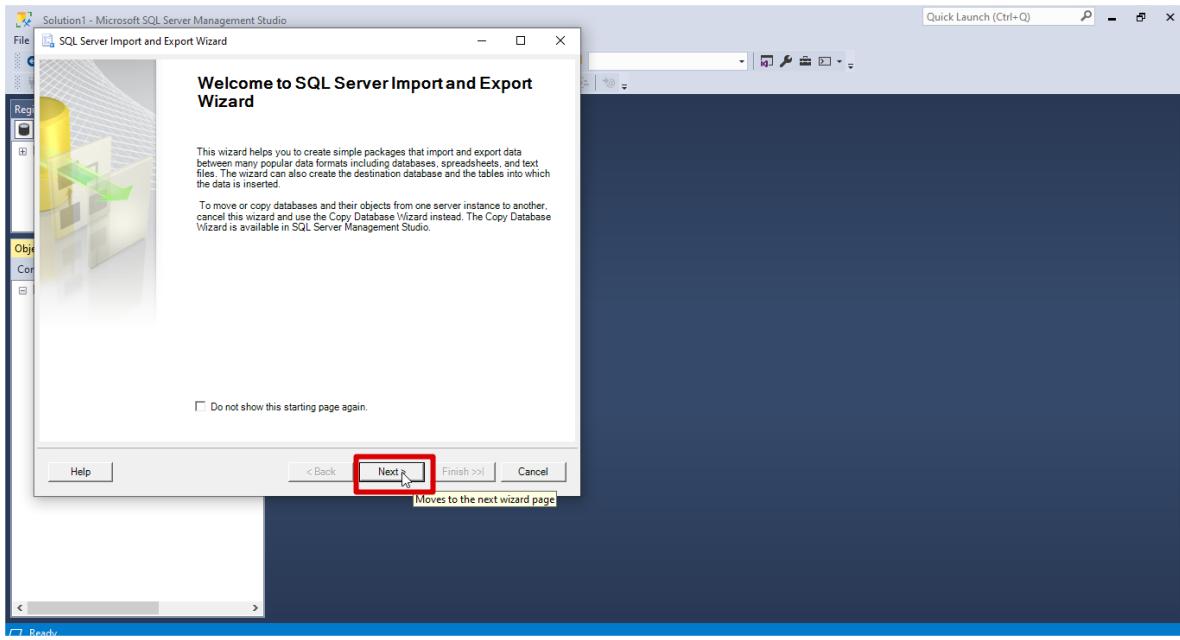
2. Se realiza la creación de la BD.

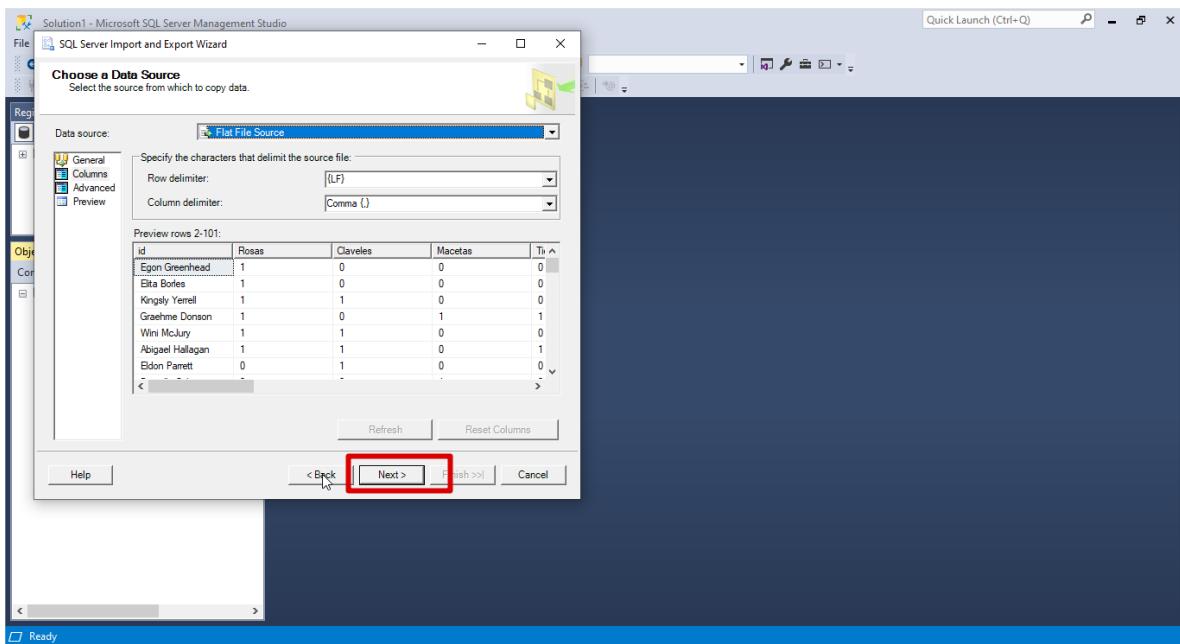
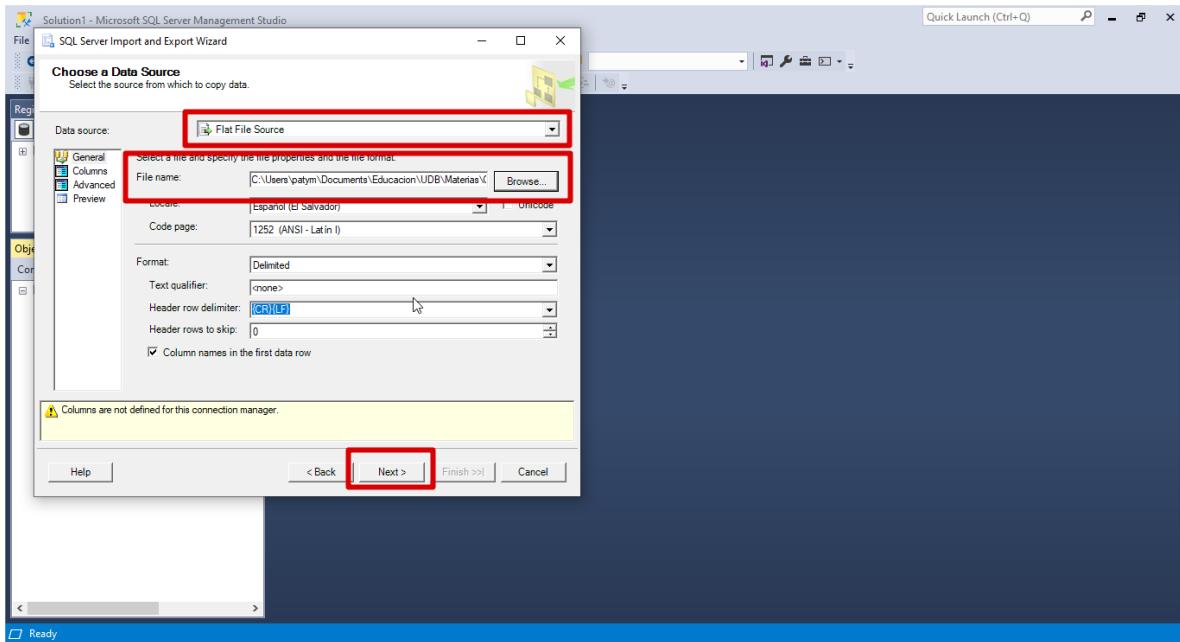


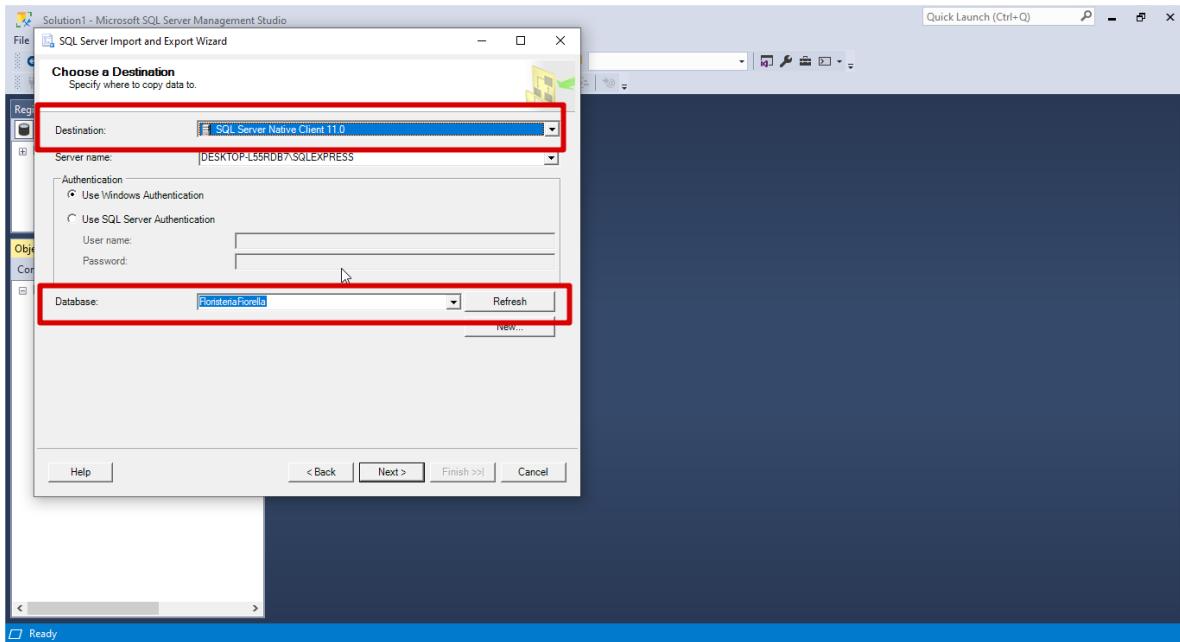


3. Se realiza la importación de las tres tablas que corresponderán a los departamentos en el esquema recien creado.

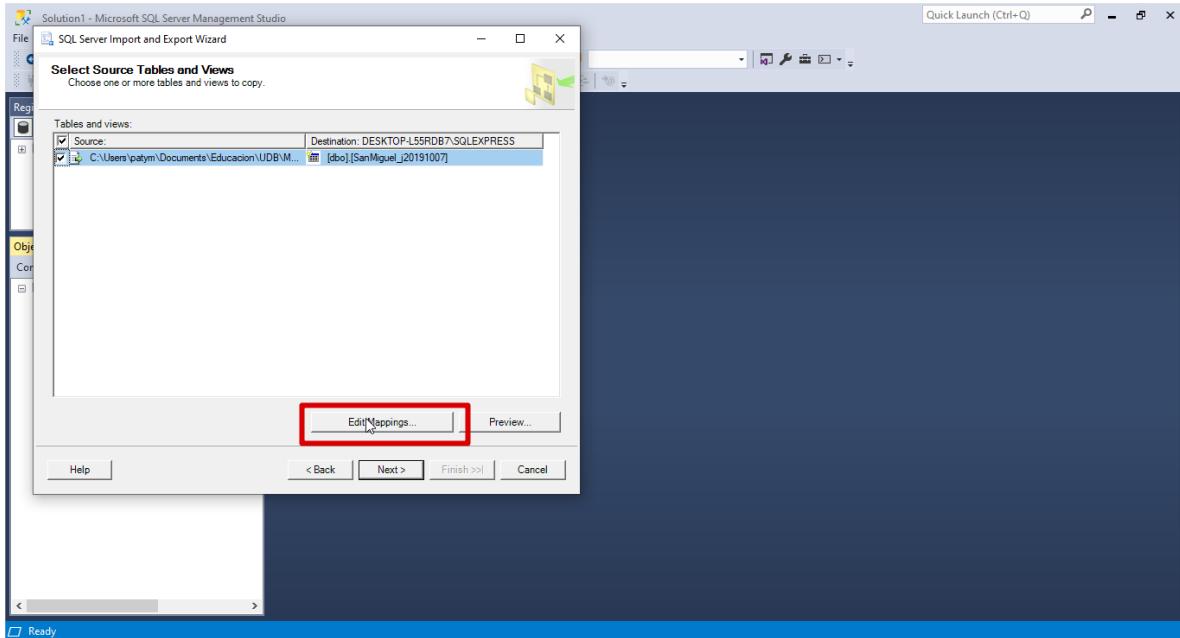


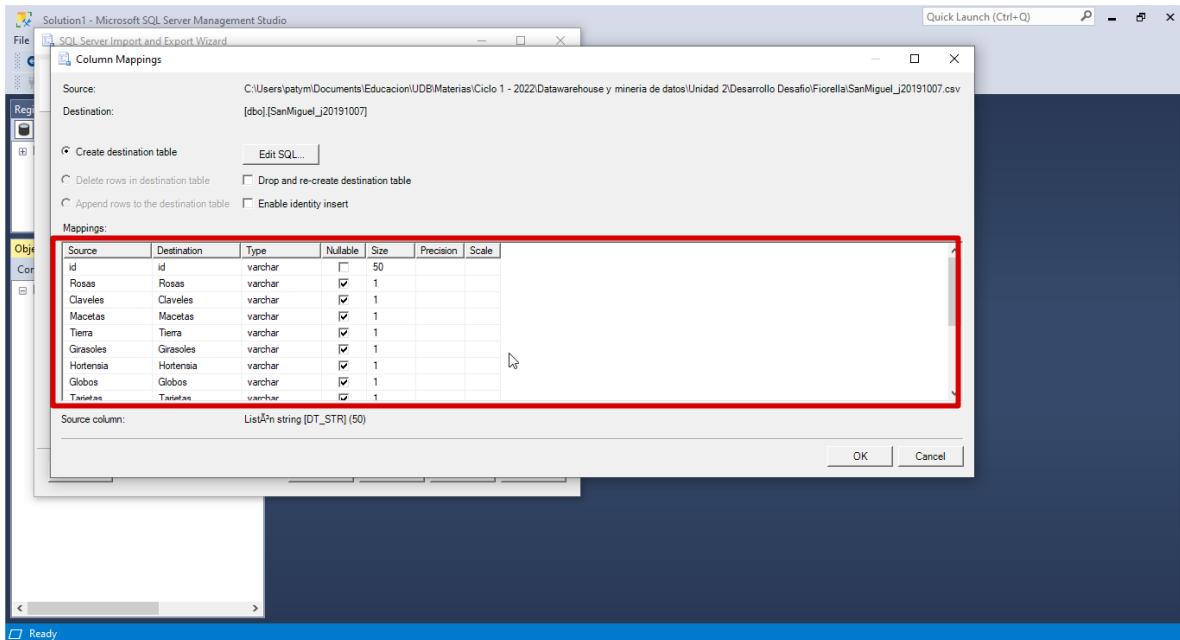




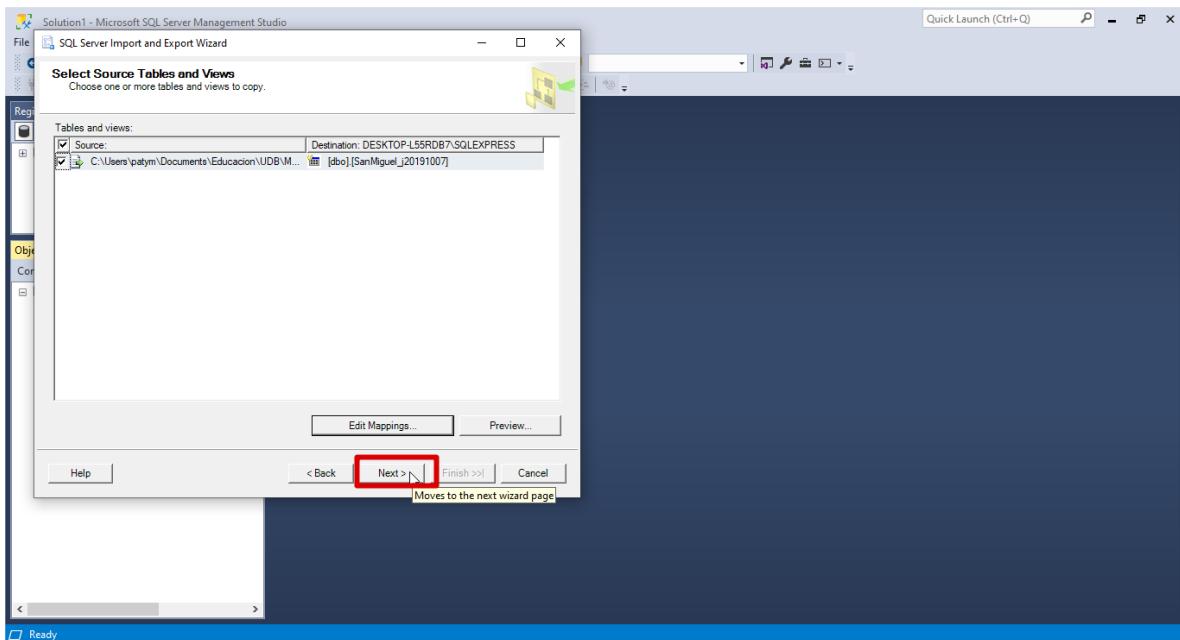


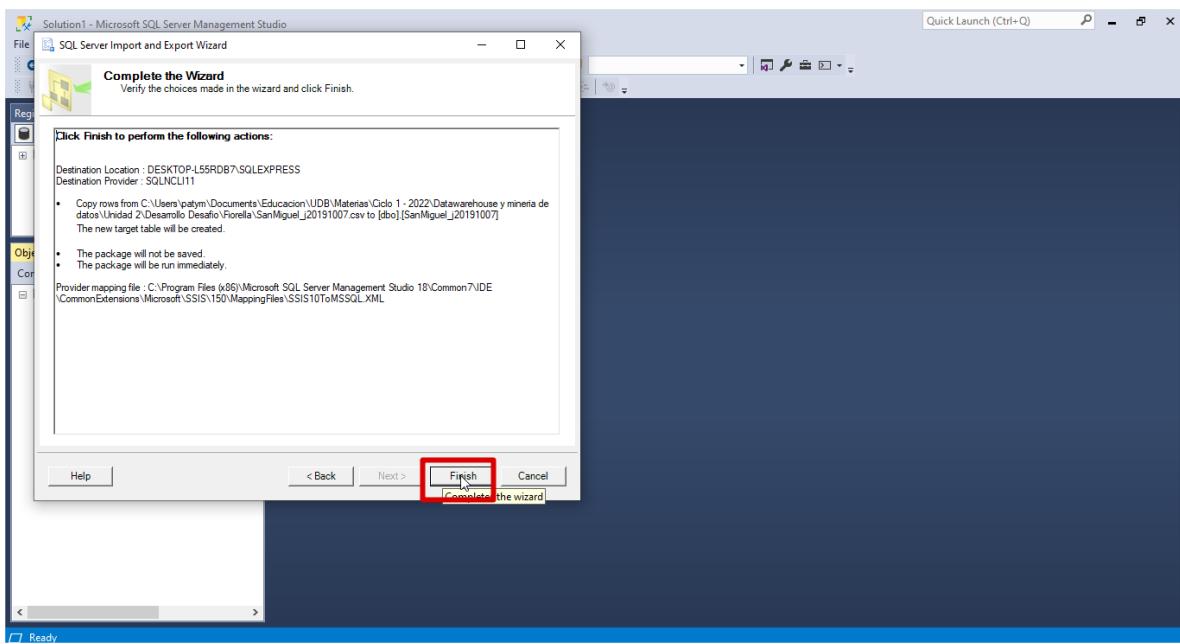
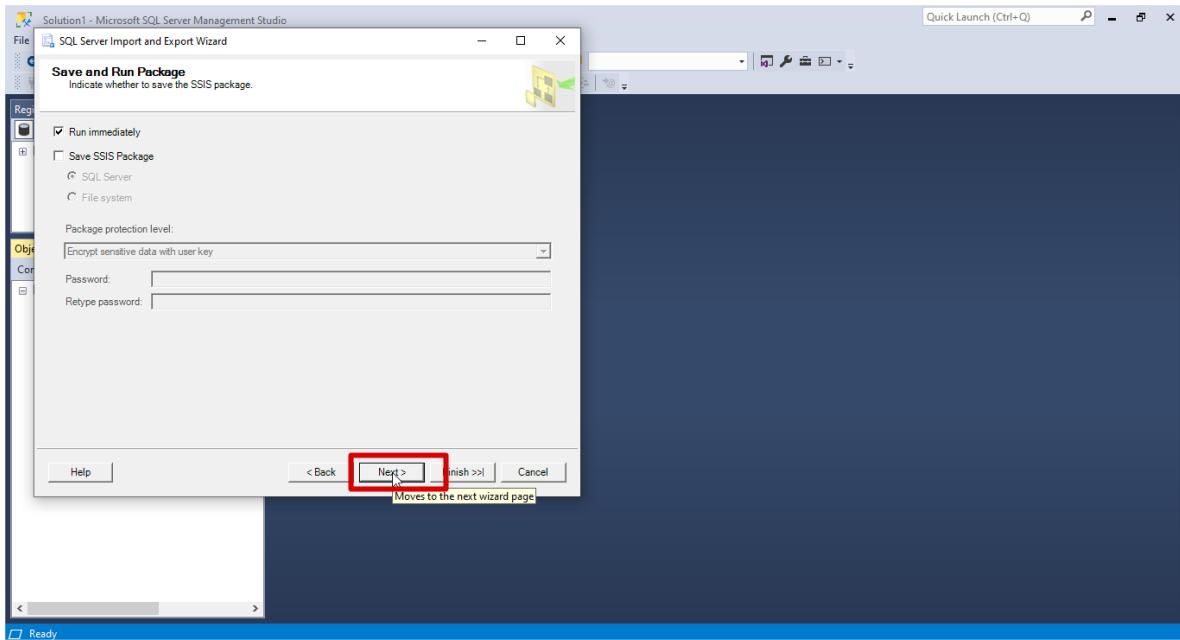
4. Se hace el mapping de los campos de las tablas para asignar los tipos de datos que correspondan según la información de cada columna.

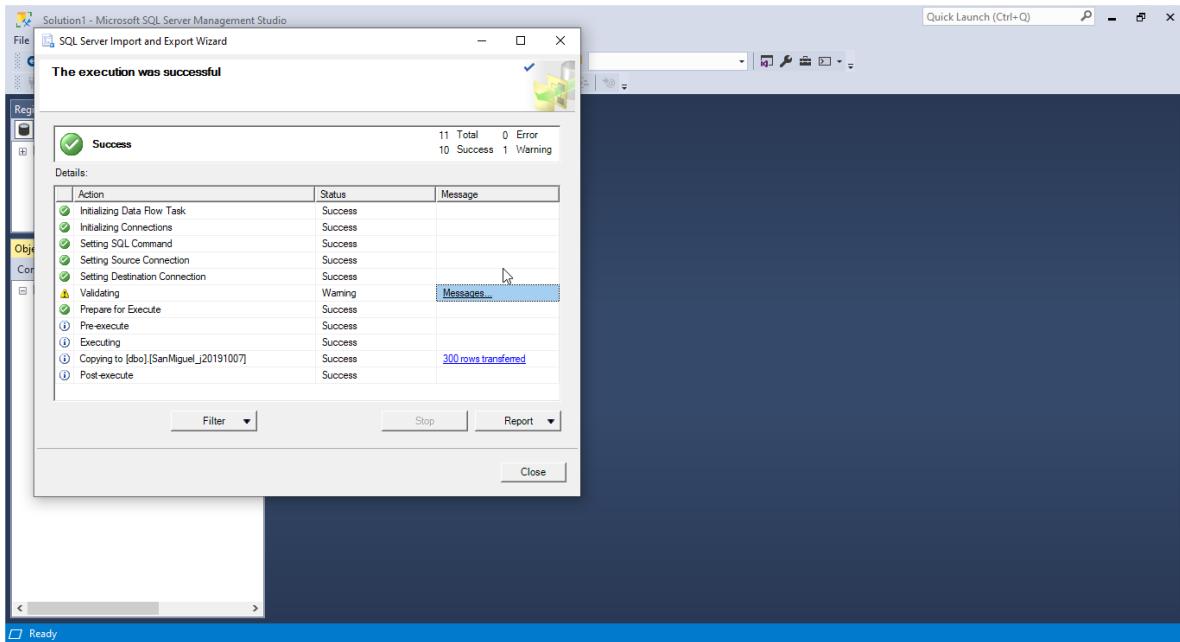




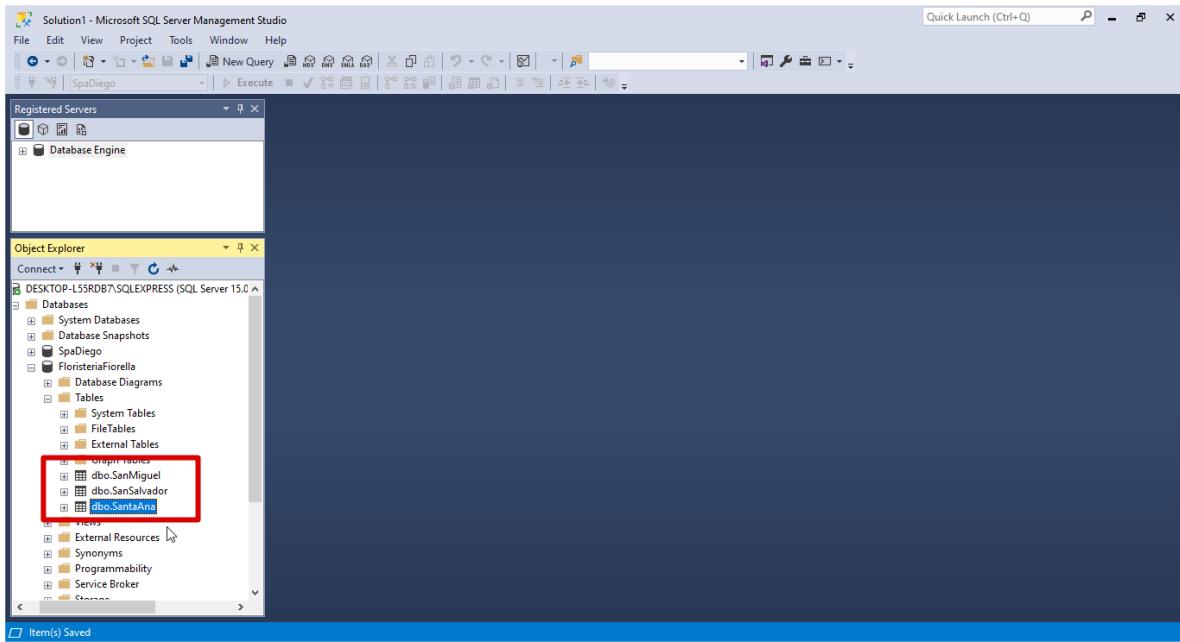
5. Se finaliza la importación.

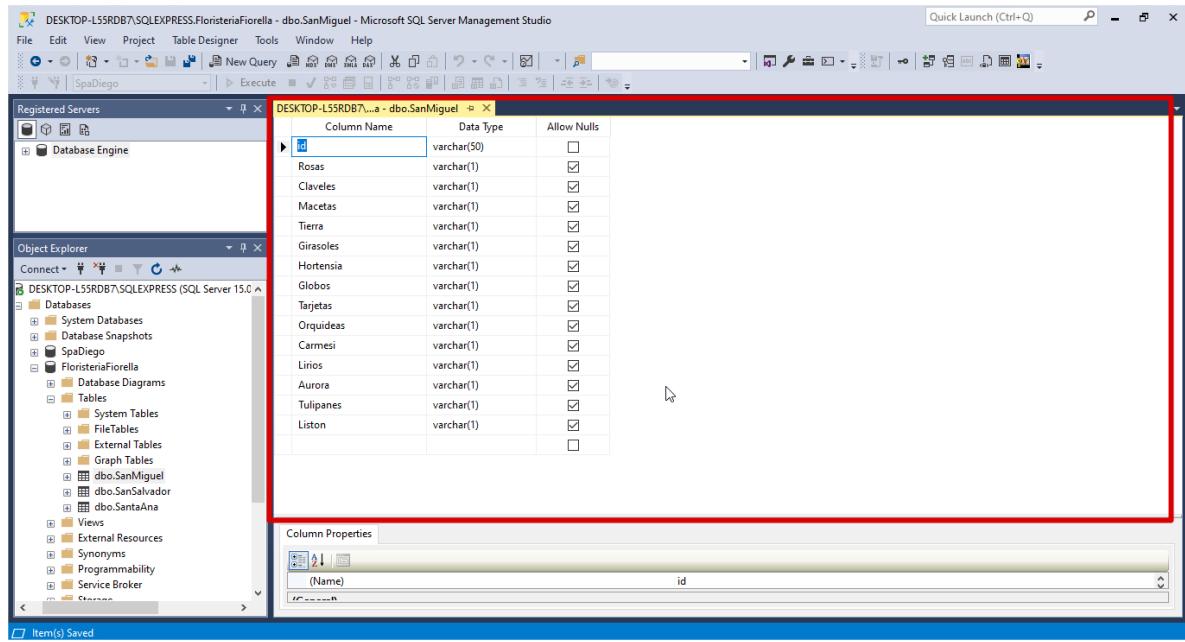






Observación: Se repiten los pasos anteriores para cada sucursal.





6. Se realiza la consulta de cada tabla para validar que todos los campos hayan sido cargados exitosamente.

SQLQuery6.sql - DESKTOP-L55RDB7\SQLEXPRESS.FloristeriaFiorella (DESKTOP-L55RDB7\patym (71)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Registered Servers

Object Explorer

Connect DESKTOP-L55RDB7\SQLEXPRESS (SQL Server 15.0)

Databases

Tables

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

SQLQuery6.sql - D...55RDB7\patym (71)*

```
select * from dbo.SanMiguel
```

Results Messages

	id	Rosas	Claveles	Macetas	Tierra	Girasoles	hortensia	Globos	Tarjetas	Orquideas	Carmesi	Litos	Aurora	Tulpanes	Liston
1	Egon Greenhead	1	0	0	0	1	1	1	0	0	0	1	0	0	1
2	Elta Boles	1	0	0	0	1	1	0	0	0	1	1	0	1	1
3	Kingsly Yerell	1	1	0	0	1	1	1	1	1	1	1	0	1	0
4	Graeme Donson	1	0	1	1	0	0	1	0	0	0	1	0	1	0
5	Wini McJury	1	1	0	0	1	1	0	1	1	0	0	1	1	1
6	Abigail Hallagan	1	1	0	1	0	0	0	1	1	0	1	1	1	0
7	Eldon Pamer	1	1	0	0	0	0	1	0	1	0	0	0	0	1
8	Bernelle Cohn	0	0	1	0	1	1	0	1	1	0	1	1	0	0
9	Cordelle Becconsall	0	0	0	0	0	1	0	0	1	1	0	1	1	1
10	Jody Mewrock	0	1	1	1	0	1	1	0	1	0	1	0	0	0
11	Gill Asbett	1	1	1	0	0	1	0	1	0	1	0	0	1	1

Query executed successfully.

Ln 1 Col 28 Ch 28 INS

SQLQuery6.sql - DESKTOP-L55RDB7\SQLEXPRESS.FloristeriaFiorella (DESKTOP-L55RDB7\patym (71)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Registered Servers

Object Explorer

Connect DESKTOP-L55RDB7\SQLEXPRESS (SQL Server 15.0)

Databases

Tables

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

SQLQuery6.sql - D...55RDB7\patym (71)*

```
select * from dbo.SanSalvador
```

Results Messages

	id	Rosas	Claveles	Macetas	Tierra	Girasoles	hortensia	Globos	Tarjetas	Orquideas	Carmesi	Litos	Aurora	Tulpanes	Liston
1	Loren Petty	1	0	1	1	0	0	1	1	1	1	1	1	1	0
2	Curran Lackey	1	1	1	1	0	0	0	1	1	1	0	0	1	1
3	Marietta Luff	1	1	0	1	0	0	1	1	1	1	0	0	1	1
4	Codi Finnemore	1	0	1	0	0	1	0	1	1	1	0	0	1	1
5	Keane McMains	1	0	0	1	0	0	0	0	1	0	0	1	1	1
6	Markus Furland	1	1	0	0	0	1	1	0	0	1	1	1	1	1
7	Davide Paujou	0	0	0	1	1	1	0	1	1	0	0	1	0	1
8	Valentine Giotto	1	0	1	1	0	0	0	0	0	0	1	0	0	1
9	Atalanta O'Haghtie	1	0	0	1	0	0	1	1	1	1	0	0	1	1
10	Roze Cratchley	1	1	0	1	1	1	1	1	1	0	0	1	0	1
11	Millicent Bewsey	1	0	1	0	1	1	1	1	0	0	0	0	0	0

Query executed successfully.

Ln 1 Col 30 Ch 30 INS

The screenshot shows the Microsoft SQL Server Management Studio interface. In the top left, there's a 'File Explorer' window titled 'Registered Servers'. Below it is the 'Object Explorer' window, which lists the database 'FloristeriaFiorella' under 'Database Engine', and further details like 'Tables', 'Views', and 'Procedures'. On the right, a large 'Results' grid displays the output of a query. The query is:

```
select * from dbo.SantaAna
```

The results grid has columns: id, Rosas, Claveles, Macetas, Tierra, Girasoles, Hortensia, Globos, Tarjetas, Orquideas, Carmesi, Lirios, Aurora, Tulpanes, Liston. There are 11 rows of data, each representing a client with their flower preferences. At the bottom of the results grid, a message says 'Query executed successfully.'

7. Se realizan las consultas necesarias para poder segmentar la información de los clientes por cada departamento.

San Miguel.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the top left, there's a 'File Explorer' window titled 'Registered Servers'. Below it is the 'Object Explorer' window, which lists the database 'FloristeriaFiorella' under 'Database Engine', and further details like 'Tables', 'Views', and 'Procedures'. On the right, a large 'Results' grid displays the output of a query. The query is:

```
select count(Rosas) as Rosas from dbo.SanMiguel where Rosas = 1
select count(Claveles) as Claveles from dbo.SanMiguel where Claveles = 1
select count(Girasoles) as Girasoles from dbo.SanMiguel where Girasoles = 1
select count(Hortensia) as Hortensia from dbo.SanMiguel where Hortensia = 1
select count(Orquideas) as Orquideas from dbo.SanMiguel where Orquideas = 1
select count(Carmesi) as Carmesi from dbo.SanMiguel where Carmesi = 1
select count(Lirios) as Lirios from dbo.SanMiguel where Lirios = 1
select count(Aurora) as Aurora from dbo.SanMiguel where Aurora = 1
select count(Tulipanes) as Tulipanes from dbo.SanMiguel where Tulipanes = 1
```

The results grid has a single column 'Rosas' with 11 rows, each containing the value 157. At the bottom of the results grid, a message says 'Query executed successfully.'

SQLQuery11.sql - ...55RDB7\patym (51)* SQLQuery10.sql - ...55RDB7\patym (53)* SQLQuery7.sql - D...55RDB7\patym (62)*

```

select count(Macetas) as Macetas from dbo.SanMiguel where Macetas = 1
select count(Tierra) as Tierra from dbo.SanMiguel where Tierra = 1
select count(Globos) as Globos from dbo.SanMiguel where Globos = 1
select count(Tarjetas) as Tarjetas from dbo.SanMiguel where Tarjetas = 1
select count(Liston) as Liston from dbo.SanMiguel where Liston = 1

```

100 %

Results Messages

	Macetas
1	141

	Tierra
1	141

	Globos
1	151

	Tarjetas
1	143

	Liston
1	149

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 5 rows

SQLQuery7.sql - D...55RDB7\patym (62)* SQLQuery9.sql - D...55RDB7\patym (60)* SQLQuery10.sql - ...55RDB7\patym (53)*

```

SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
FROM [FloristeriaFiorella].[dbo].[SanMiguel]
group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
having count(*) > 1

```

100 %

Results Messages

	Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
1	0	0	0	1	0	1	0	0	1	0	0	1	1	0
2	0	0	1	1	1	0	1	0	1	1	0	0	1	1
3	1	1	0	0	0	0	0	0	0	0	1	0	1	0

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 3 rows

San Salvador.

SQLQuery7.sql - D...55RDB7\patym (62)* × SQLQuery6.sql - D...55RDB7\patym (71)*

```
select count(Rosas) as Rosas from dbo.SanSalvador where Rosas = 1
select count(Claveles) as Claveles from dbo.SanSalvador where Claveles = 1
select count(Girasoles) as Girasoles from dbo.SanSalvador where Girasoles = 1
select count(Hortensia) as Hortensias from dbo.SanSalvador where Hortensia = 1
select count(Orquideas) as Orquideas from dbo.SanSalvador where Orquideas = 1
select count(Carmesi) as Carmesi from dbo.SanSalvador where Carmesi = 1
select count(Lirios) as Lirios from dbo.SanSalvador where Lirios = 1
select count(Aurora) as Aurora from dbo.SanSalvador where Aurora = 1
select count(Tulipanes) as Tulipanes from dbo.SanSalvador where Tulipanes = 1
```

100 %

Results Messages

Rosas	
1	612
Claveles	
1	350
Girasoles	
1	371
Hortensias	
1	374
Orquideas	
1	380
Carmesi	
1	353
Lirios	
1	365
Aurora	
1	384

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 9 rows

SQLQuery11.sql - D...55RDB7\patym (51)* SQLQuery10.sql - D...55RDB7\patym (53)* SQLQuery7.sql - D...55RDB7\patym (62)* ×

```
select count(Macetas) as Macetas from dbo.SanSalvador where Macetas = 1
select count(Tierra) as Tierra from dbo.SanSalvador where Tierra = 1
select count(Globos) as Globos from dbo.SanSalvador where Globos = 1
select count(Tarjetas) as Tarjetas from dbo.SanSalvador where Tarjetas = 1
select count(Liston) as Liston from dbo.SanSalvador where Liston = 1
```

100 %

Results Messages

Macetas	
1	392
Tierra	
1	368
Globos	
1	587
Tarjetas	
1	384
Liston	
1	690

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 5 rows

SQLQuery7.sql - D...55RDB7\patym (62)* SQLQuery9.sql - D...55RDB7\patym (60) SQLQuery10.sql - ...55RDB7\patym (53)*

```

SELECT [Rosas].[Claveles].[Macetas].[Tierra].[Girasoles].[Hortensia].[Globos].[Tarjetas],
       [Orquideas].[Carmesi].[Lirios].[Aurora].[Tulipanes].[Liston]
  FROM [FloristeriaFiorella].[dbo].[SanSalvador]
 GROUP BY [Rosas].[Claveles].[Macetas].[Tierra].[Girasoles].[Hortensia].[Globos].[Tarjetas],
          [Orquideas].[Carmesi].[Lirios].[Aurora].[Tulipanes].[Liston]
 HAVING COUNT(*) > 1

```

100 %

Results Messages

Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
27	1	0	1	1	1	1	1	1	0	1	0	1	1
28	1	1	0	0	0	1	1	1	0	0	0	0	1
29	1	1	0	0	0	1	1	0	0	1	0	1	1
30	1	1	0	0	1	1	1	0	1	0	1	0	1
31	1	1	0	1	0	0	1	0	1	0	0	1	1
32	1	1	0	1	0	0	1	1	0	1	0	0	1
33	1	1	0	1	0	1	0	0	1	1	0	0	1
34	1	1	0	1	0	1	1	0	0	1	0	1	1
35	1	1	0	1	1	0	1	1	0	0	1	1	1
36	1	1	0	1	1	1	1	0	0	0	1	1	1
37	1	1	1	0	1	0	1	0	1	0	1	1	0
38	1	1	1	0	1	0	1	0	1	1	1	0	1
39	1	1	1	0	1	1	0	1	1	1	1	1	1
40	1	1	1	1	0	0	1	1	0	0	1	1	1
41	1	1	1	1	0	1	1	1	0	1	1	1	1
42	1	1	1	1	0	1	1	1	0	1	1	0	1
43	1	1	1	1	1	0	0	0	0	0	1	1	1
44	1	1	1	1	1	0	1	1	0	1	0	1	1
45	1	1	1	1	1	1	1	1	0	0	0	0	1

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 45 rows

SQLQuery7.sql - D...55RDB7\patym (62)* SQLQuery9.sql - D...55RDB7\patym (60) SQLQuery10.sql - ...55RDB7\patym (53)*

```

having count(*) > 1

```

100 %

Results Messages

Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
1	1	0	0	0	0	1	1	1	1	0	1	0	1
2	1	0	1	0	0	0	1	0	0	0	0	0	1
3	1	0	1	0	0	0	1	0	0	0	1	0	1
4	1	1	0	1	0	0	1	0	1	0	0	1	1
5	1	1	0	1	0	1	0	0	1	1	0	0	1

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 5 rows

Santa Ana.

SQLQuery7.sql - D...55RDB7\patym (62)* X SQLQuery6.sql - D...55RDB7\patym (71)*

```
select count(Rosas) as Rosas from dbo.SantaAna where Rosas = 1
select count(Claveles) as Claveles from dbo.SantaAna where Claveles = 1
select count(Girasoles) as Girasoles from dbo.SantaAna where Girasoles = 1
select count(Hortensia) as Hortensias from dbo.SantaAna where Hortensia = 1
select count(Orquideas) as Orquideas from dbo.SantaAna where Orquideas = 1
select count(Carmesi) as Carmesi from dbo.SantaAna where Carmesi = 1
select count(Lirios) as Lirios from dbo.SantaAna where Lirios = 1
select count(Aurora) as Aurora from dbo.SantaAna where Aurora = 1
select count(Tulipanes) as Tulipanes from dbo.SantaAna where Tulipanes = 1
```

100 %

Results Messages

Rosas	176
Claveles	246
Girasoles	266
Hortensias	243
Orquideas	259
Carmesi	236
Lirios	270
Aurora	260

Query executed successfully. DESKTOP-L55RDB7\SQLEXPRESS ... DESKTOP-L55RDB7\patym ... FloristeriaFiorella 00:00:00 | 9 rows

SQLQuery11.sql - D...55RDB7\patym (51)* SQLQuery10.sql - D...55RDB7\patym (53)* SQLQuery7.sql - D...55RDB7\patym (62)* X

```
select count(Macetas) as Macetas from dbo.SantaAna where Macetas = 1
select count(Tierra) as Tierra from dbo.SantaAna where Tierra = 1
select count(Globos) as Globos from dbo.SantaAna where Globos = 1
select count(Tarjetas) as Tarjetas from dbo.SantaAna where Tarjetas = 1
select count(Liston) as Liston from dbo.SantaAna where Liston = 1
```

100 %

Results Messages

Macetas	245
Tierra	236
Globos	154
Tarjetas	252
Liston	136

Query executed successfully. DESKTOP-L55RDB7\SQLEXPRESS ... DESKTOP-L55RDB7\patym ... FloristeriaFiorella 00:00:00 | 5 rows

SQLQuery7.sql - D...55RDB7\patym (62)* SQLQuery9.sql - D...55RDB7\patym (60) SQLQuery10.sql -...55RDB7\patym (53)*

```

    FROM [floristeriafiorella].[dbo].[SanMiguel]
    group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
    [Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
    having count(*) > 1

    SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
    [Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
    FROM [floristeriafiorella].[dbo].[SantaAna]
    group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
    [Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
    having count(*) > 1
  
```

Results Messages

Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
9	0	1	0	0	0	1	0	1	1	1	0	0	0
10	0	1	0	0	1	1	0	1	0	1	1	0	0
11	1	0	1	0	1	0	0	1	0	1	1	1	0
12	1	0	1	1	0	1	1	0	0	1	1	1	0
13	1	0	1	1	1	1	1	0	1	0	0	1	0
14	1	1	1	0	1	0	0	1	1	0	1	0	0
15	1	1	1	1	0	0	0	0	1	1	0	0	0

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 15 rows

8. Se realizan las consultas necesarias para poder segmentar la información de los clientes por país.

SQLQuery12.sql -...55RDB7\patym (58)* SQLQuery9.sql - D...55RDB7\patym (60) SQLQuery10.sql -...55RDB7\patym (53)* SQLQuery11.sql -...55RDB7\patym (51)*

```

    select count(ventasSV.Rosas) as Rosas
    from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
    where ventasSV.Rosas = 1
    group by ventasSV.Rosas

    select count(ventasSV.Claveles) as Claveles
  
```

Results Messages

Rosas
945

Claveles
733

Girasoles
787

Hortensias
774

Orquideas
797

Carmesi
747

Lirios
795

Auroras
804

Tulipanes
753

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 1 rows

```

SQLQuery12.sql -...55RDB7\patym (58)*      SQLQuery9.sql - D...55RDB7\patym (60)      SQLQuery10.sql -...55RDB7\patym (53)*      SQLQuery11.sql -...55RDB7\patym (51)*
where ventasSV.Tulipanes = 1
group by ventasSV.Tulipanes

select count(ventasSV.Macetas) as Macetas
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Macetas = 1
group by ventasSV.Macetas

select count(ventasSV.Tierra) as Tierra
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Tierra = 1
group by ventasSV.Tierra

```

100 %

	Results	Messages
Macetas	1 778	
Tierra	1 745	
Globos	1 892	
Tarjetas	1 779	
Liston	1 975	

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 5 rows

```

SQLQuery12.sql -...55RDB7\patym (58)*      SQLQuery9.sql - D...55RDB7\patym (60)      SQLQuery10.sql -...55RDB7\patym (53)*      SQLQuery11.sql -...55RDB7\patym (51)*
select count(ventasSV.Liston) as Liston
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Liston = 1
group by ventasSV.Liston

SELECT [Rosas], [Claveles], [Macetas], [Tierra], [Girasoles], [Hortensia], [Globos], [Tarjetas],
[Orquideas], [Carmesí], [Lirios], [Aurora], [Tulipanes], [Liston]
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
group by [Rosas], [Claveles], [Macetas], [Tierra], [Girasoles], [Hortensia], [Globos], [Tarjetas],
[Orquideas], [Carmesí], [Lirios], [Aurora], [Tulipanes], [Liston]
having count(*) > 1

```

100 %

Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
79	1	1	1	0	1	0	1	1	1	0	0	0	1
80	1	1	1	0	1	0	1	1	0	1	0	0	1
81	1	1	1	0	1	1	0	1	1	1	1	1	1
82	1	1	1	1	0	0	0	0	1	1	0	0	0
83	1	1	1	1	0	0	1	0	1	1	0	1	1
84	1	1	1	1	0	0	1	1	0	0	0	1	1
85	1	1	1	1	0	1	1	0	1	1	1	1	1
86	1	1	1	1	0	1	1	1	0	1	1	0	1
87	1	1	1	1	1	0	0	0	0	0	1	1	1
88	1	1	1	1	1	0	1	1	0	1	0	1	1
89	1	1	1	1	1	1	1	1	0	0	0	0	1

Query executed successfully. | DESKTOP-L55RDB7\SQLEXPRESS ... | DESKTOP-L55RDB7\patym ... | FloristeriaFiorella | 00:00:00 | 89 rows

```

SQLQuery12.sql ...55RDB7\patym (58)*      SQLQuery9.sql - D...55RDB7\patym (60)      SQLQuery10.sql ...55RDB7\patym (53)*      SQLQuery11.sql ...55RDB7\patym (51)*

select count(ventasSV.Liston) as Liston
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Liston = 1
group by ventasSV.Liston

SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
having count(*) > 2


```

Results

	Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
1	0	0	1	1	0	1	0	1	1	1	0	0	1	1
2	1	0	0	0	0	0	1	1	1	1	0	1	0	1
3	1	0	1	0	0	0	1	0	0	0	0	0	0	1
4	1	0	1	0	0	0	1	0	0	0	0	1	0	1
5	1	0	1	0	1	1	1	1	1	1	1	0	0	1
6	1	1	0	0	0	0	1	1	1	0	0	0	0	1
7	1	1	0	1	0	0	1	0	1	0	0	0	1	1
8	1	1	0	1	0	1	0	0	1	1	0	0	1	1
9	1	1	1	1	1	1	1	1	0	0	0	0	0	1

Messages

Query executed successfully.

```

SQLQuery12.sql ...55RDB7\patym (58)*      SQLQuery9.sql - D...55RDB7\patym (60)      SQLQuery10.sql ...55RDB7\patym (53)*      SQLQuery11.sql ...55RDB7\patym (51)*

select count(ventasSV.Liston) as Liston
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Liston = 1
group by ventasSV.Liston

SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],[Tarjetas],
[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
having count(*) > 3


```

Results

	Rosas	Claveles	Macetas	Tierra	Girasoles	Hortensia	Globos	Tarjetas	Orquideas	Carmesi	Lirios	Aurora	Tulipanes	Liston
1	1	1	0	1	0	1	0	0	1	1	0	0	1	1

Messages

Query executed successfully.

9. Con la información filtrada en las consultas SQL, se procede al análisis de los datos.

Por departamento:

Flores:

Sucursal	Rosas	Claveles	Girasoles	Hortensias	Orquídeas	Carmesi	Lirios	Aurora	Tulipanes
San Miguel	157	137	150	157	158	158	160	160	149
San Salvador	612	350	371	374	380	353	365	384	357
Santa Ana	176	246	266	243	259	236	270	260	247

Adicionales:

Sucursal	Macetas	Tierra	Globos	Tarjetas	Liston
San Miguel	141	141	151	143	149
San Salvador	392	368	587	384	690
Santa Ana	245	236	154	252	136

Como se puede observar en las tablas anteriores, los producto que sobresalen por departamento serían:

San Miguel: Se venden por igual los lirios y auroras y como adicionales, los globos.

San Salvador: Se venden en su mayoria las rosas con listones.

Santa Ana: Se venden principalmente lirios y como adicionales, tarjetas.

Por país:

Rosas	Claveles	Girasoles	Hortensia	Orquideas	Carmesi	Lirios	Aurora	Tulipanes
945	733	787	774	797	747	795	804	753

Macetas	Tierra	Globos	Tarjetas	Liston
778	745	892	779	975

Combinación mas vendida (Se repite mas de tres veces):

Rosas	Claveles	Tierra	Hortensia	Orquideas	Carmesi	Tulipanes	Liston
1	1	1	1	1	1	1	1

Como se puede apreciar, a nivel del país, las flores mas vendidas son las rosas, y en cuanto a adicionales, los listones.

Mientras que en cuanto a la combinación que sobresale a nivel del país, con 3 repeticiones, es una mezcla de rosas, claveles, hortensias, orquídeas, carmesí y tulipanes, acompañados de tierra y listón.

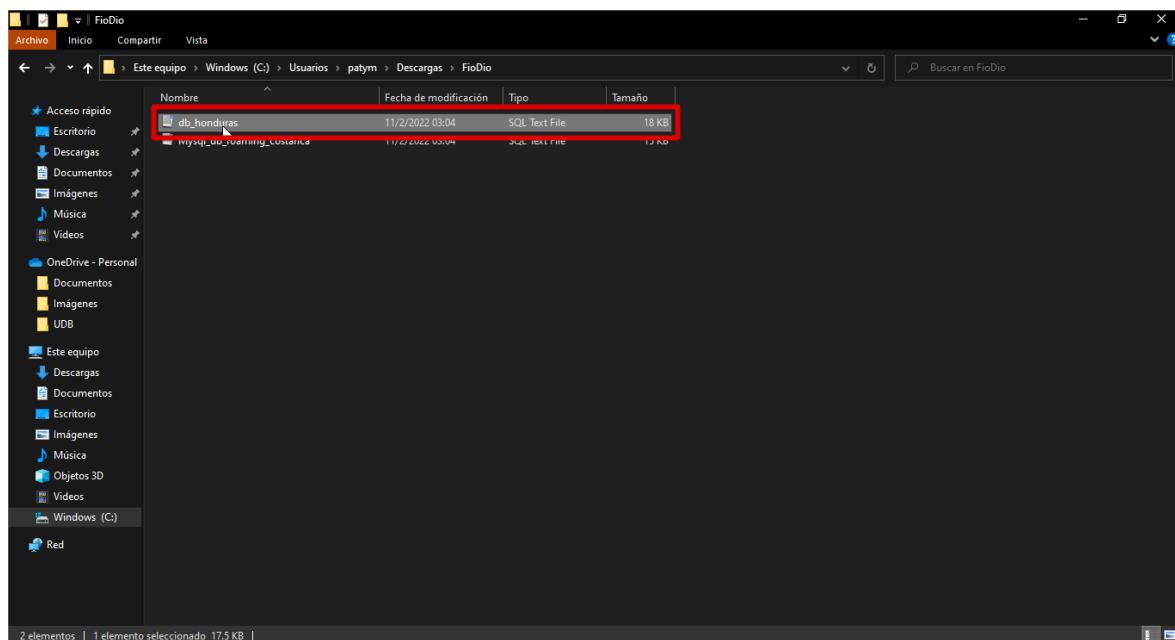
Ejercicio 3.

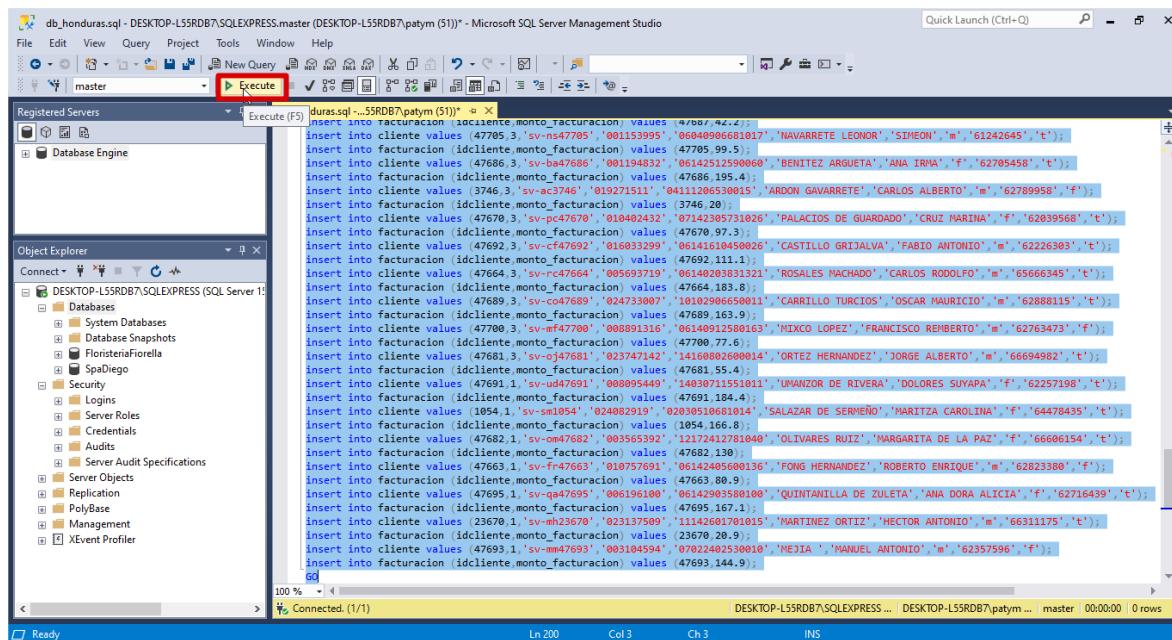
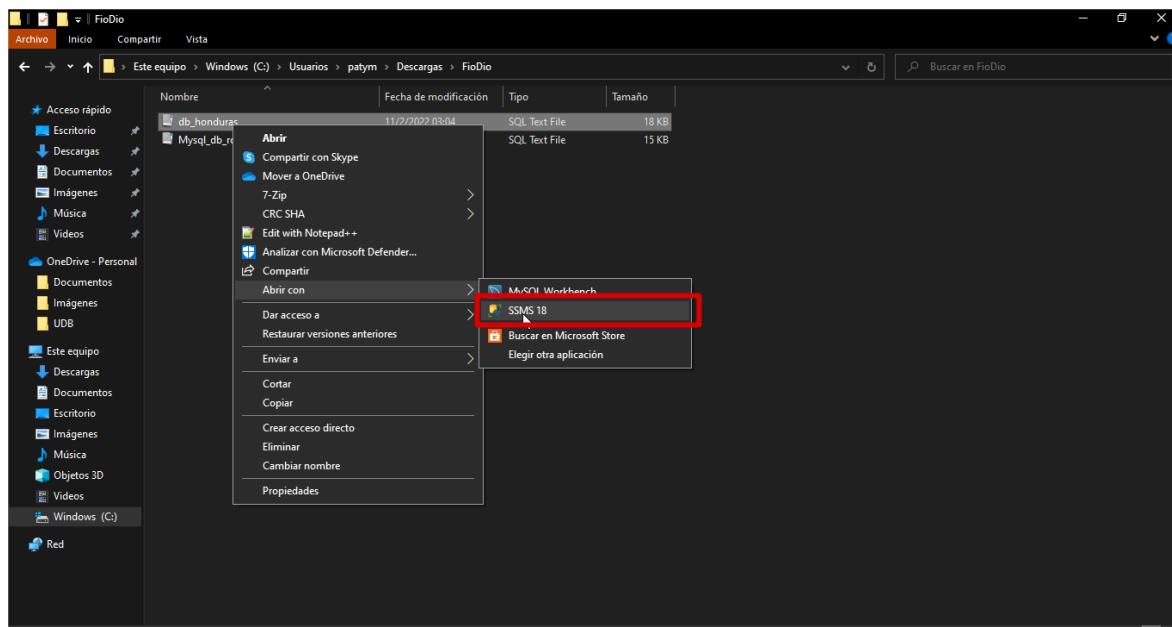
La telefonía “**FioDio**” solicita realizar un ETL que exporte una base de datos de Mysql y SQL Server, al final el destino serán dos archivos de Excel en donde en un archivo estarán los clientes preferenciales y ejecutivos y en el segundo los de gobierno y turista, adicional en los archivos de Excel se deberá crear un campo código de país, que se llenará sustraendo los dos primeros caracteres de código cliente, ver imagen a continuación.

Porcentaje alcanzado: 100%

Procedimiento:

1. Se realiza la importación de la base de datos SQL.





The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'db_honduras.sql - DESKTOP-L55RDB7\SQLEXPRESS.db_roaming_honduras (DESKTOP-L55RDB7\patym (51))'.

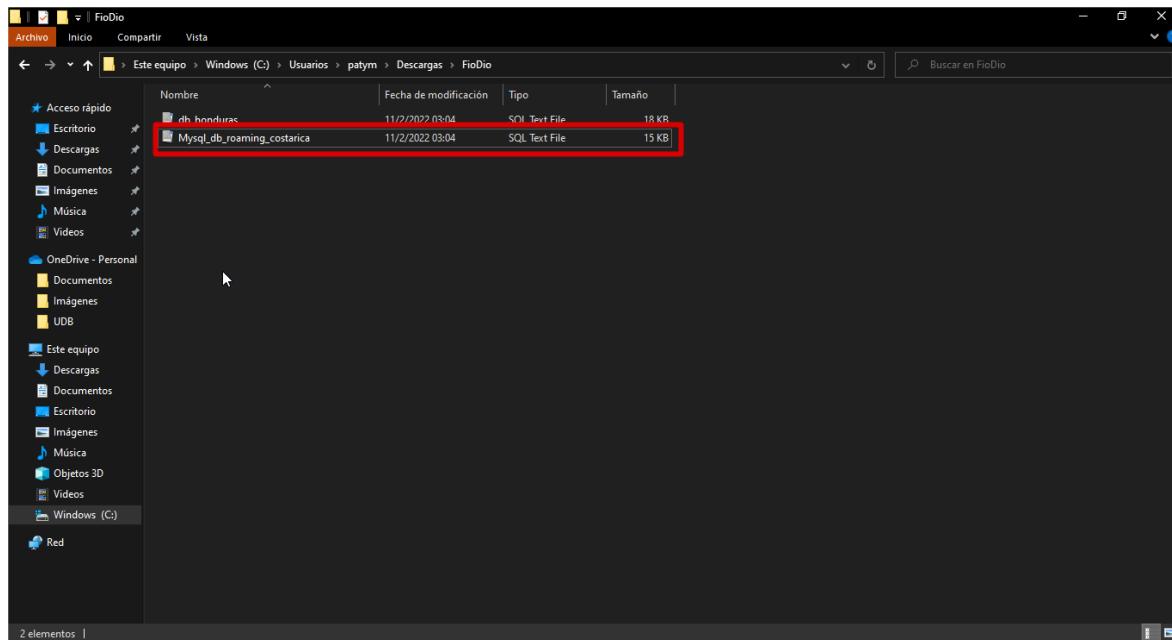
The left pane displays the 'Registered Servers' and 'Object Explorer'. In Object Explorer, the 'db_roaming_honduras' database is selected under 'DESKTOP-L55RDB7\SQLEXPRESS (SQL Server 15)'.

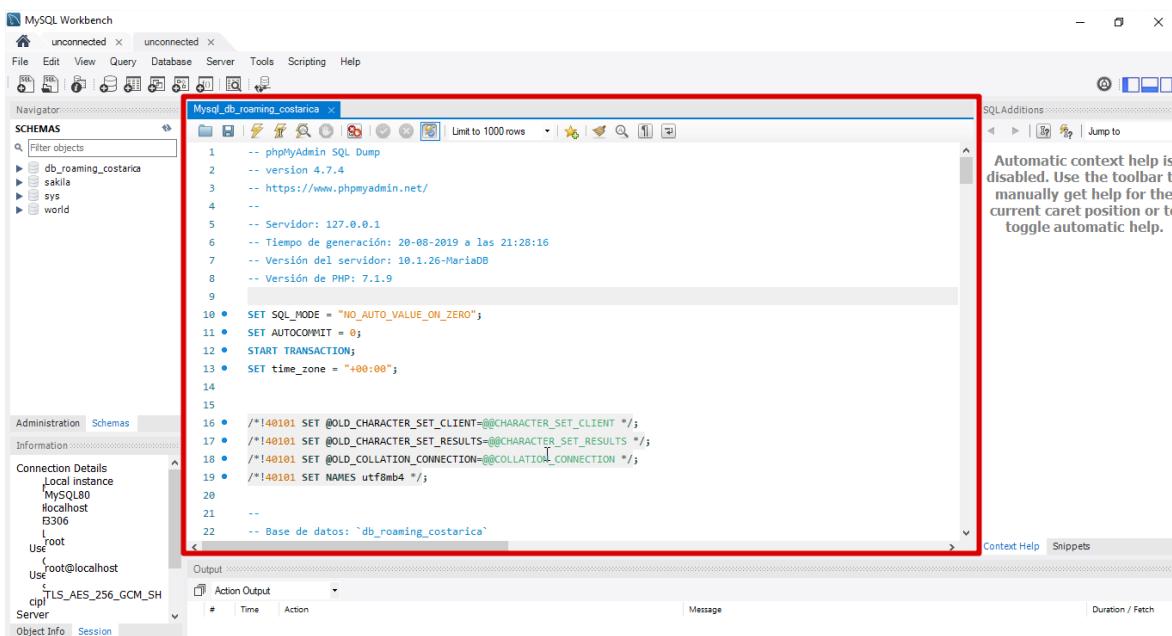
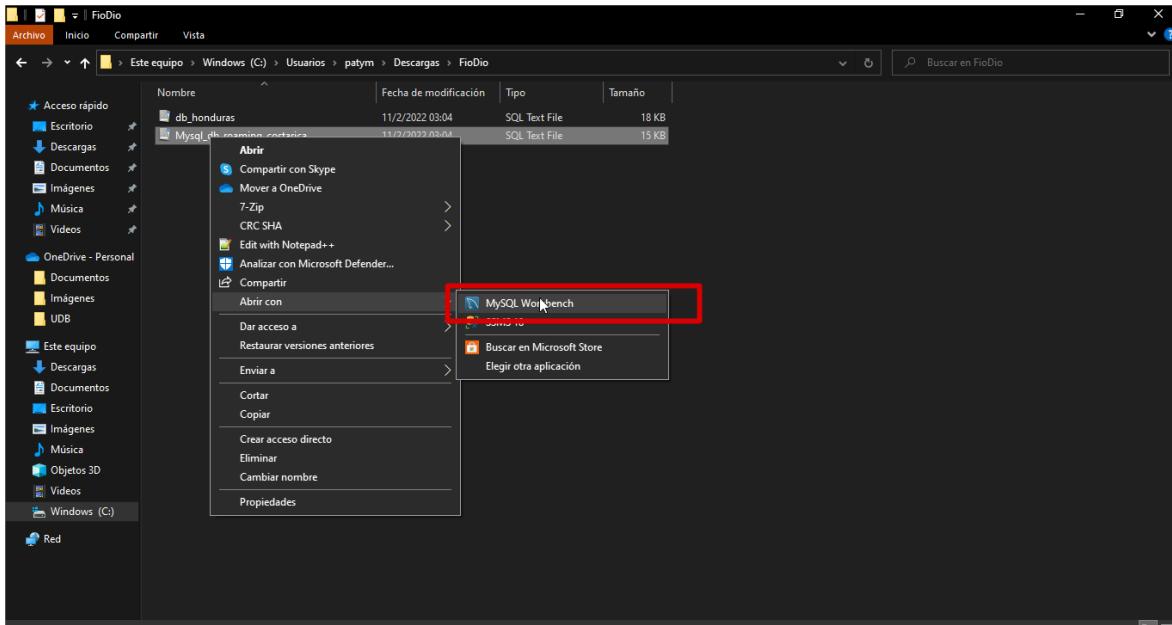
The main pane shows a query window with the following SQL code:

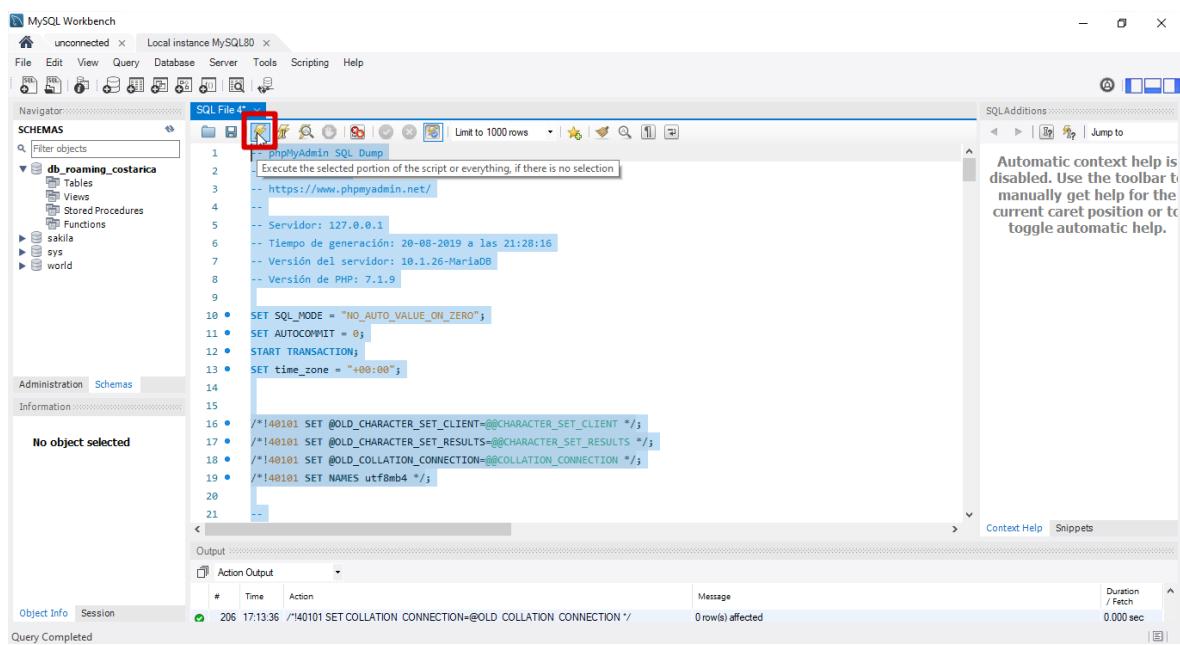
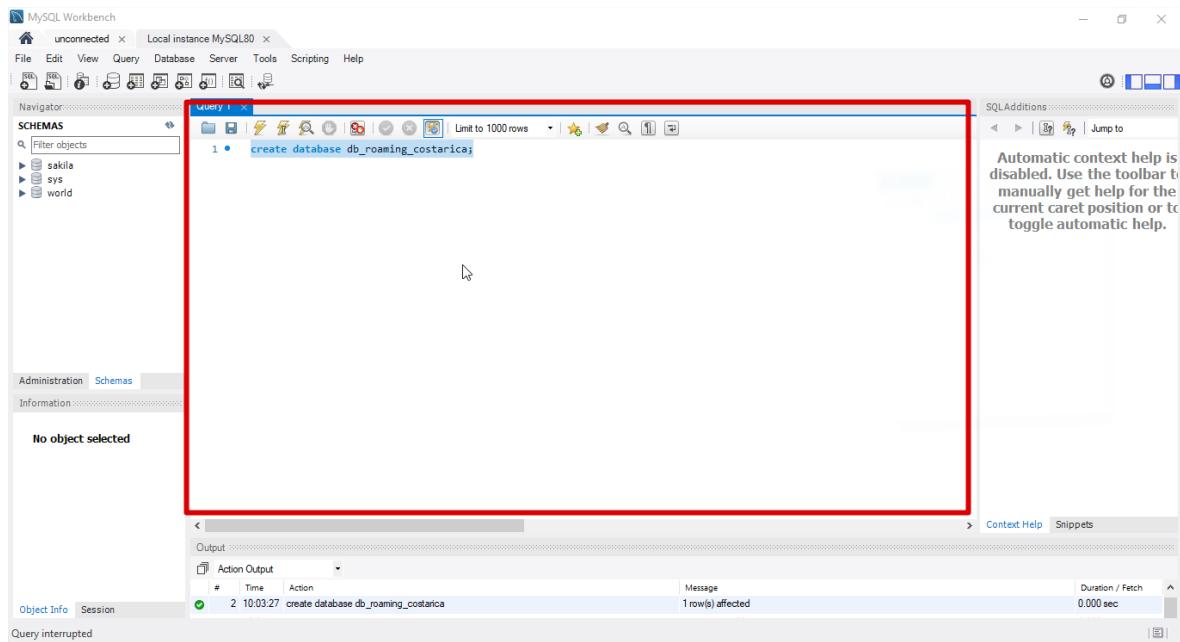
```
insert into facturacion (idcliente,monito_facturacion) values (47687,42.2);
insert into cliente values ('47705_3','sv-na47705','001153995','060490966801017','NAVARRETE LEONOR','SIMEON','m','61242645','t');
insert into facturacion (idcliente,monito_facturacion) values (47705,99.5);
insert into cliente values ('47686_3','sv-ba47686','001194832','061425125900608','BENITEZ ARGUETA','ANA IRMA','f','62705458','t');
insert into facturacion (idcliente,monito_facturacion) values (47686,195.4);
insert into cliente values ('3746_3','sv-ac3746','019271511','04111206530015','ARDON GAVARRETE','CARLOS ALBERTO','m','62789958','f');
insert into facturacion (idcliente,monito_facturacion) values (3746,20);
insert into cliente values ('47670_3','sv-pc47670','010402432','07124305731026','PALACIOS DE GUARDADO','CRUZ MARINA','f','62089568','t');
insert into facturacion (idcliente,monito_facturacion) values (47670,97.3);
insert into cliente values ('47692_3','sv-cf47692','016033290','06141610450026','CASTILLO GRIJALVA','FABIO ANTONIO','m','62226303','t');
insert into facturacion (idcliente,monito_facturacion) values (47692,111.1);
insert into cliente values ('47664_3','sv-rc47664','005693719','06140203831321','ROSALES MACHADO','CARLOS RODOLFO','m','65666345','t');
insert into facturacion (idcliente,monito_facturacion) values (47664,183.8);
insert into cliente values ('47689_3','sv-co47689','024733007','10102986650011','CARRILLO TURCIOS','OSCAR MAURICIO','m','62888115','t');
insert into facturacion (idcliente,monito_facturacion) values (47689,163.9);
insert into cliente values ('47700_3','sv-mf47700','008891316','06140912508163','MIXCO LOPEZ','FRANCISCO REMBERTO','m','62763473','f');
```

The status bar at the bottom shows 'Query executed successfully.' and the execution time '00:00:00 0 rows'.

2. Se realiza la importación de la base de datos MySQL.







```

-- phpMyAdmin SQL Dump
-- version 4.7.4
-- https://www.phpmyadmin.net/
--
-- Servidor: 127.0.0.1
-- Tiempo de generación: 20-08-2019 a las 21:28:16
-- Versión del servidor: 10.1.26-MariaDB
-- Versión de PHP: 7.1.9

SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
SET AUTOCOMMIT = 0;
START TRANSACTION;
SET time_zone = "+00:00";

/* 140101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */
SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT
SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS
SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION
SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT
SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS
SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0
SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='TRADITIONAL,ALLOW_INVALID_DATES'
SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0

CREATE TABLE `tipo_clientes` (
  `idtipocliente` int(11) NOT NULL,
  `descripcion` varchar(100) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8;

ALTER TABLE `tipo_clientes` ADD PRIMARY KEY (`idtipocliente`);

ALTER TABLE `facturacion` MODIFY `idfacturacion` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=1681;

ALTER TABLE `cliente` ADD CONSTRAINT `fk_cliente_reference_tipocliente` FOREIGN KEY (`idtipocliente`) REFERENCES `tipo_clientes`(`idtipocliente`);

ALTER TABLE `facturacion` ADD CONSTRAINT `fk_facturacion_reference_clientes` FOREIGN KEY (`idcliente`) REFERENCES `cliente`(`idcliente`);

COMMIT;

```

3. Se inspeccionan la estructura y datos de las tablas SQL y MySQL.

Column Name	Data Type	Allow Nulls
idcliente	int	<input checked="" type="checkbox"/>
idtipocliente	int	<input checked="" type="checkbox"/>
codigo_cliente	varchar(15)	<input checked="" type="checkbox"/>
dui	varchar(9)	<input checked="" type="checkbox"/>
nit	varchar(14)	<input checked="" type="checkbox"/>
apellidos	varchar(250)	<input checked="" type="checkbox"/>
nombrres	varchar(250)	<input checked="" type="checkbox"/>
sexo	char(1)	<input checked="" type="checkbox"/>
numero_telefono	varchar(8)	<input checked="" type="checkbox"/>
estado	char(1)	<input checked="" type="checkbox"/>

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator: Local instance MySQL80 ×

SQL File 4*: db_roaming_costarica.cliente

SCHEMAS: db_roaming_costarica

Tables: cliente, facturacion, tipo_clientes

Views, Stored Procedures, Functions, sakila, sys, world

Info Columns Indexes Triggers Foreign keys Partitions Grants DDL

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
idcliente	int		NO		latin1_swedish_ci	select,insert,update,references		
idtipocliente	int		NO		latin1_swedish_ci	select,insert,update,references		
codigo_cliente	varchar(15)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
dni	varchar(9)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
nit	varchar(14)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
apellidos	varchar(250)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
nombres	varchar(250)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
sexo	char(1)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
numero_telefono	varchar(8)		NO	latin1	latin1_swedish_ci	select,insert,update,references		
estado	char(1)		NO	latin1	latin1_swedish_ci	select,insert,update,references		

Administration Schemas

Information

Table: cliente

Columns:

- idcliente int PK
- idtipocliente int
- codigo_cliente varchar
- dni varchar
- nit varchar
- apellidos varchar
- nombres varchar
- sexo char(1)
- numero_telefono varchar
- estado char(1)

Count: 10 Refresh

Object Info Session

Query Completed

DESKTOP-L55RDB7\SQLEXPRESS.db_roaming_honduras - dbo.facturacion - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

Registered Servers

Database Engine

Object Explorer

Connect

DESKTOP-L55RDB7\SQLEXPRESS (SQL Server)

Databases

db_roaming_honduras

Tables

dbo.cliente

dbo.facturacion

dbo.tipo_clientes

Views

Synonyms

Programmability

Service Broker

Storage

Column Name Data Type Allow Nulls

idfacturacion	int	<input type="checkbox"/>
idcliente	int	<input type="checkbox"/>
monto_facturacion	decimal(10, 2)	<input type="checkbox"/>

Column Properties

(General)

Name: idfacturacion

Allow Nulls: No

Data Type: int

Default Value or Binding:

Table Designer

(General)

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Schemas: db_roaming_costarica

SQL File 4: db_roaming_costarica.cliente db_roaming_costarica.facturacion

Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
idfacturacion	int		NO			select,insert,update,references		
iddcliente	int		NO			select,insert,update,references		
monto_facturacion	decimal(10,2)		NO			select,insert,update,references	auto_increment	

Table: facturacion

Columns:

- idfacturacion int AI PK
- iddcliente int
- monto_facturacion decimal(

Count: 3

Object Info Session Refresh

Query Completed

DESKTOP-L55RDB7\SQLEXPRESS.db_roaming_honduras - Microsoft SQL Server Management Studio

File Edit View Project Table Designer Tools Window Help

Registered Servers

Object Explorer

Column Name Data Type Allow Nulls

idtipoclientes	int	<input type="checkbox"/>
nombre_tipo	varchar(100)	<input type="checkbox"/>

Column Properties

(General)

(Name) idtipoclientes

Allow Nulls No

Data Type int

Table Designer

(General)

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Schemas: db_roaming_costarica

Table: tipo_clientes

Columns:

- idtipocliente int PK
- nombre_tipo varchar(100)

Count: 2

4. Se crea la solución Bussines intelligence en Visual Studio.

Página de inicio - Microsoft Visual Studio

Archivo | Editor | Ver | Proyecto | Depurar | Equipo | Herramientas | Prueba | Analizar | Ventana | Ayuda

Nuevo

Cerrar solución

Guardar elementos seleccionados Ctrl+S

Guardar todo Ctrl+Mayús.+S

Control de código fuente

Configurar página...

Imprimir... Ctrl+P

Configuración de la cuenta...

Archivos recientes

Proyectos y soluciones recientes

Salir Alt+F4

Reciente

Ayer

Lista de errores

Lista de errores | Errores | Advertencias | Mensajes |

Proyecto...

Proyecto a partir de código existente...

Abrir...

Obtenga código de un sistema de control de versión remoto o abra algo en la unidad local.

Extraer del repositorio:

- ✓ Azure DevOps
- Abrir un proyecto o una solución...
- Abrir carpeta
- Abrir sitio web

Noticias de Visual Studio

Visual Studio 2022: available on-demand. Visual Studio 2022 Live now available on-demand and learn all about it.

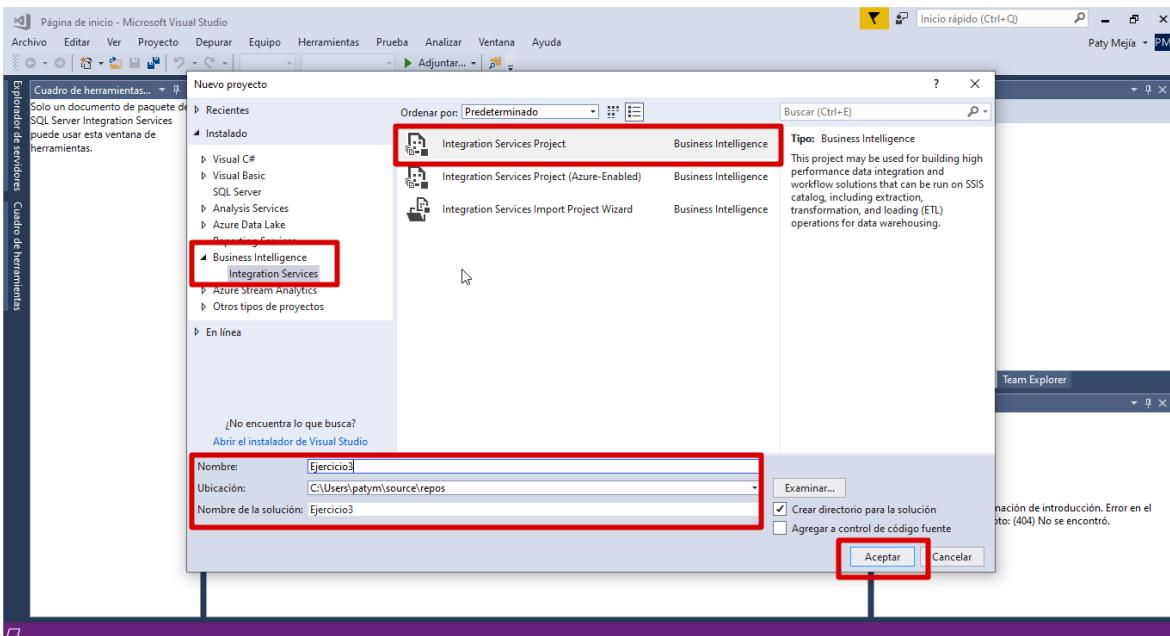
Visual Studio 2022: We've reached general availability! Visual Studio 2022 and its tools are now available.

Explorador de soluciones

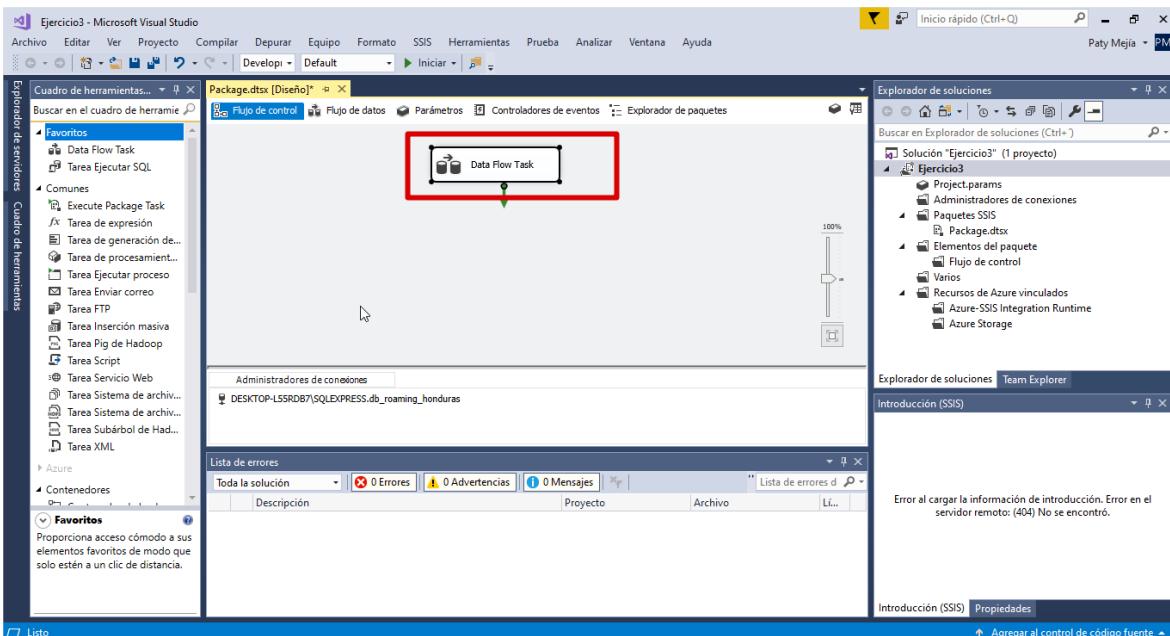
Explorador de soluciones Team Explorer

Introducción (SSIS)

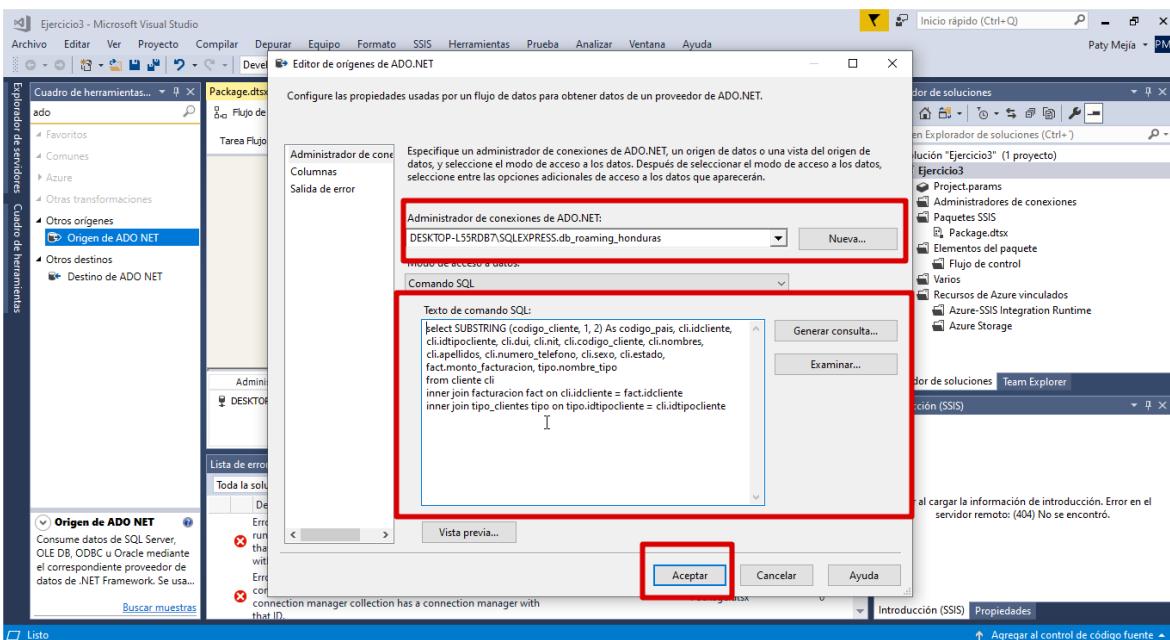
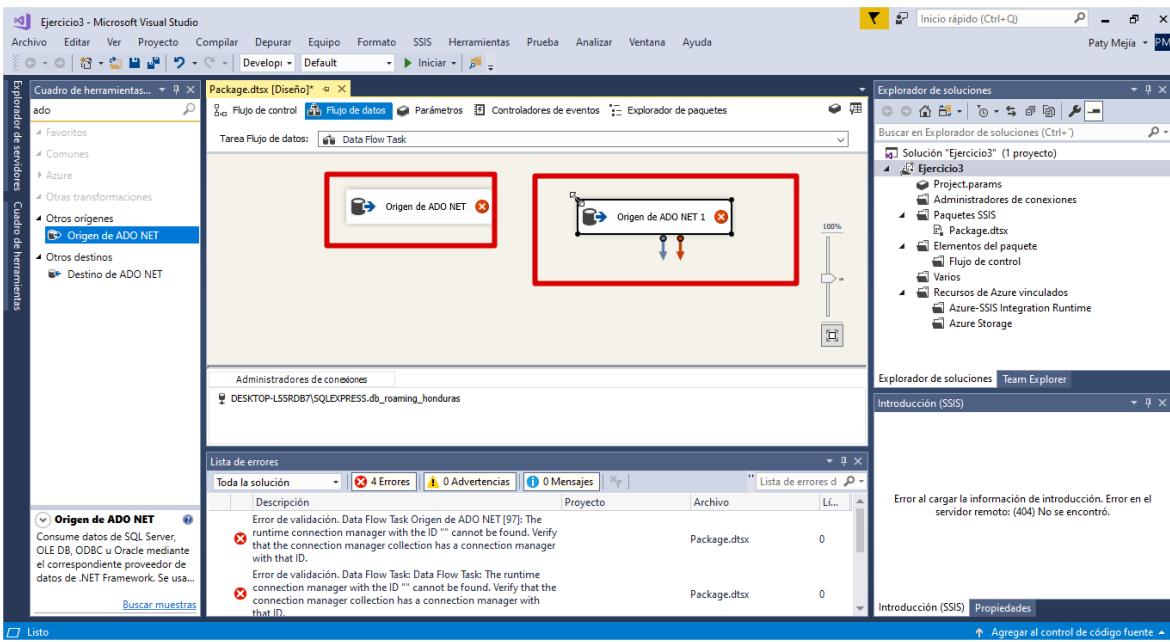
Error al cargar la información de introducción. Error en el servidor remoto: (404) No se encontró.



5. Se realiza la selección de elementos para el flujo del proceso.



6. Se mandan a extraer los orígenes SQL y MySQL para el origen de datos.



SQLQuery1.sql - DESKTOP-L55RDB7\SQLEXPRESS.db_roaming_honduras (DESKTOP-L55RDB7\patym (65)) - Microsoft SQL Server Management Studio

```

File Edit View Query Project Tools Window Help
New Query Execute
db_roaming_honduras
Registered Servers Database Engine
Object Explorer Connect
DESKTOP-L55RDB7\SQLEXPRESS (SQL Server)
Database Engine
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.cliente
dbo.facturacion
dbo.tipo_clientes
Views
External Resources
Synonyms
Programmability
Service Broker
Storage
Schemas

```

```

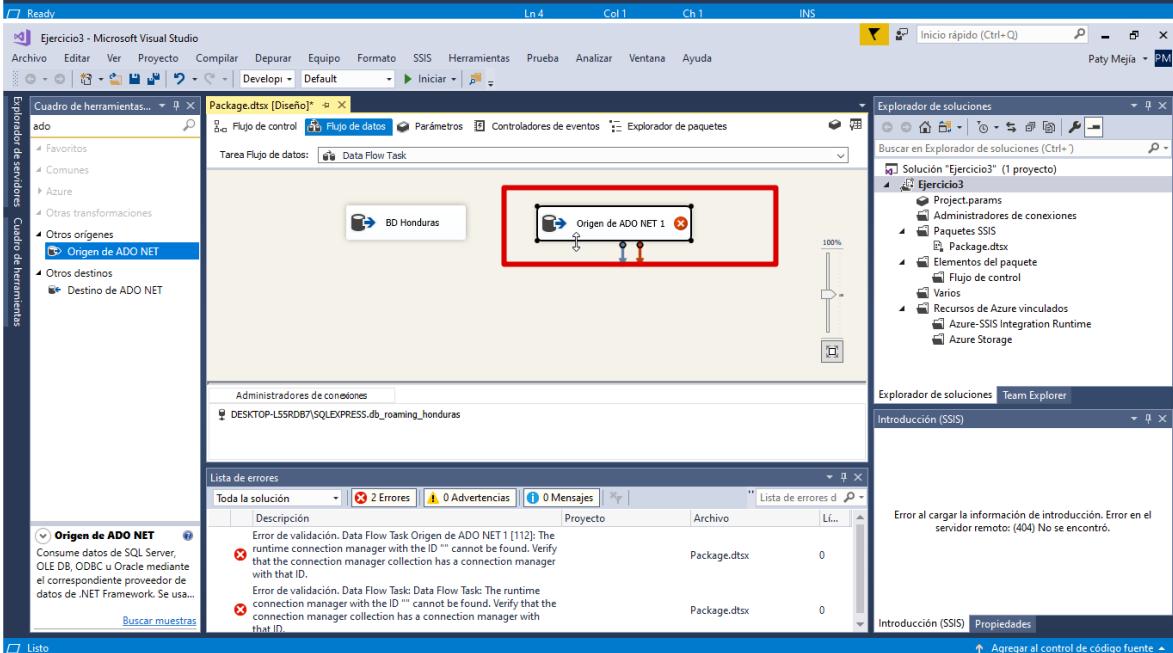
SQLQuery1.sql - D:\55RDB7\patym (65)*
select * from tipo_clientes
select * from cliente
select SUBSTRING (codigo_cliente, 1, 2) As codigo_pais, cli.idcliente, cli.idtipocliente, cli.dui, cli.nit, cli.codigo_cliente, cli.nombres, c
from cliente cli
inner join facturacion fact on cli.idcliente = fact.idcliente
inner join tipo_clientes tipo on tipo.idtipocliente = cli.idtipocliente

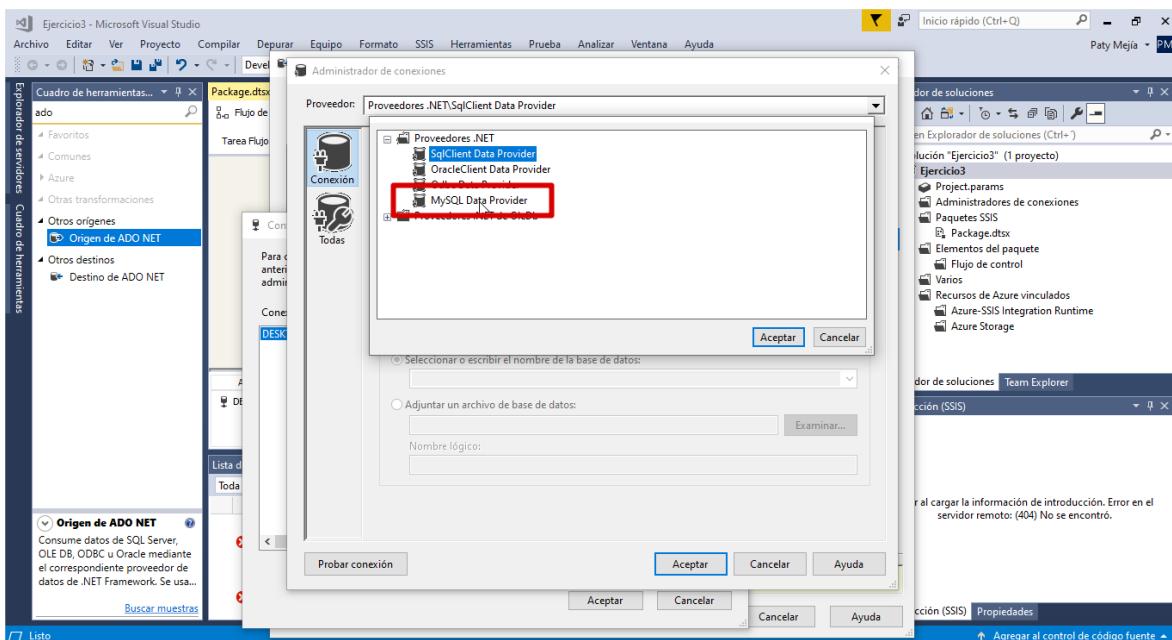
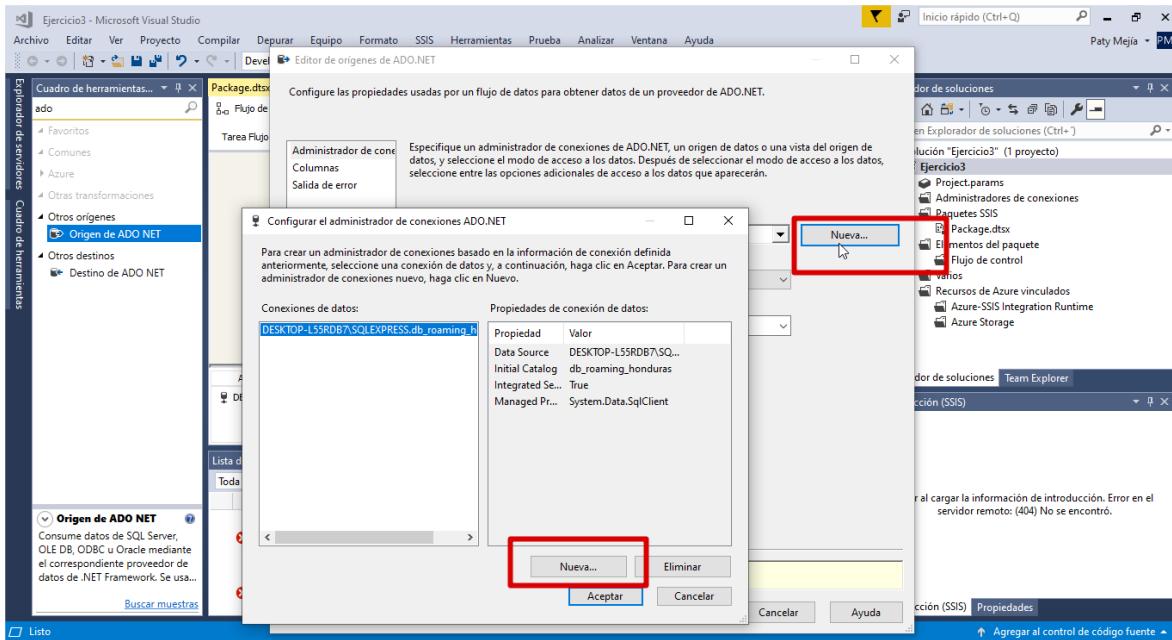
```

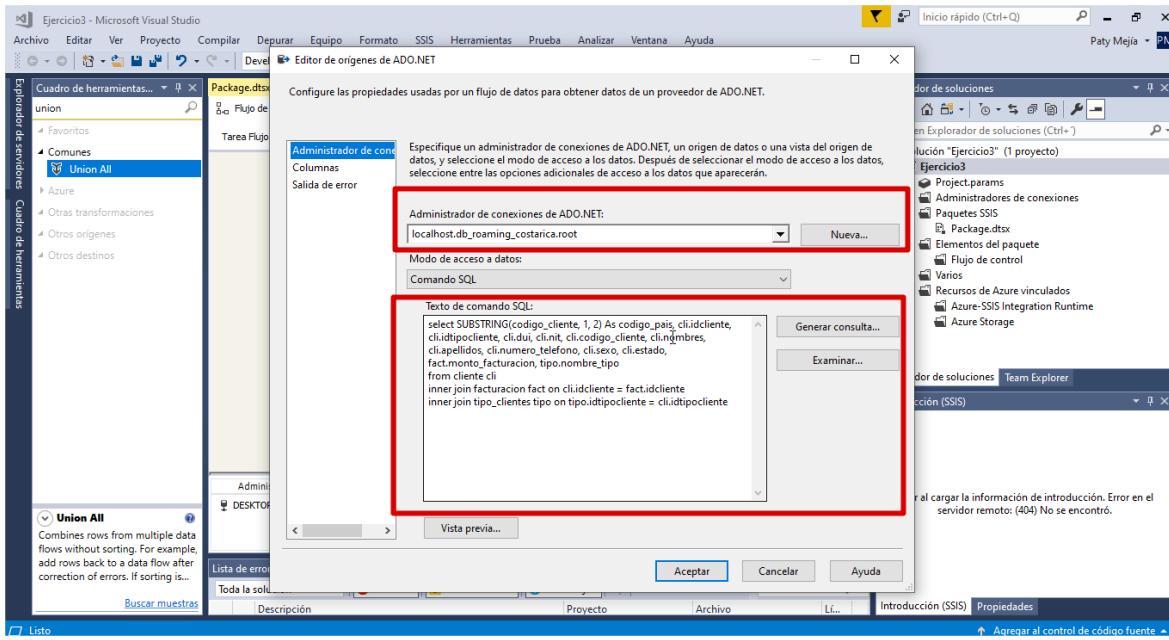
Results Messages

codigo_pais	idcliente	idtipocliente	dui	nit	codigo_cliente	nombres	apellidos	numero_telefono	sexo	estado	monto_facturaci
sv	1421	1	014482905	02100107651014	svnn1421	NESTOR MARIO	MARROQUIN AREVALO	77407501	m	f	56.00
sv	2164	1	01045721	02102502640021	svng2164	GABRIEL ANTONIO	MAYORGAS RAMIREZ	77075723	m	t	90.60
sv	30105	1	006305814	06142202811038	svmj30105	JAIME RAUL	MARROQUIN MARROQUIN	79767136	m	t	80.10
sv	5909	1	033652129	06101509821073	svr5909	ROBERTO	RAMIREZ DEODANES	75369733	m	t	121.80
sv	47673	1	020540517	06141908811370	svk47673	RICARDO ERNESTO	LARA CACERES	79857856	m	f	161.70
sv	47630	1	004240783	10680502561016	svr47630	RAUL	SANCHEZ MARTINEZ	74398467	m	t	42.60
sv	13188	1	004669026	10112802731010	svpa13188	ANGEL VICTOR	PINO MERINO	79232040	m	t	179.40
sv	47665	1	003719006	05150902480019	svq47665	JUAN JUVENTICO	CASTILLO MEZOQUITA	78514479	m	t	135.80
sv	42266	1	015646170	05111211811026	svgc42266	CARLOS RICARDO	GHIRINGHELLO ROSALES	72471706	f	f	57.10
sv	8266	1	005598692	06141903671011	svma8266	ALICIA ORBELINA	MENDEZ BENITEZ	70705856	m	t	148.90
sv	17777	2	0000000000000000	0000000000000000	svll17777	OLIVIA COMO	DOCUMACRO UNICO	77004001	.	.	100.00

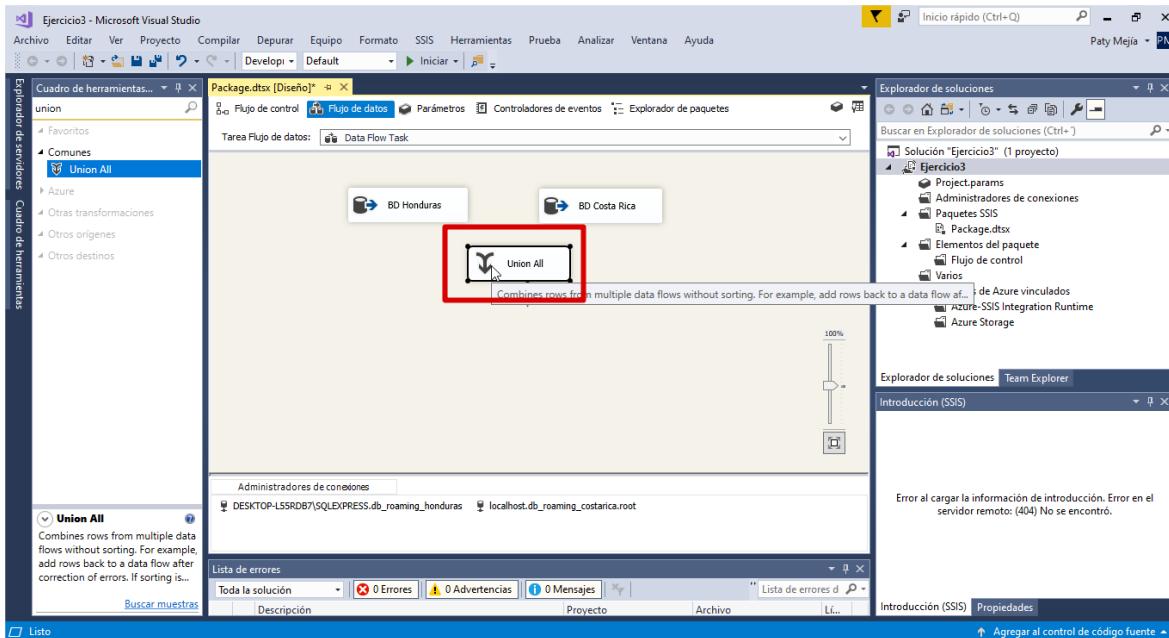
Query executed successfully.

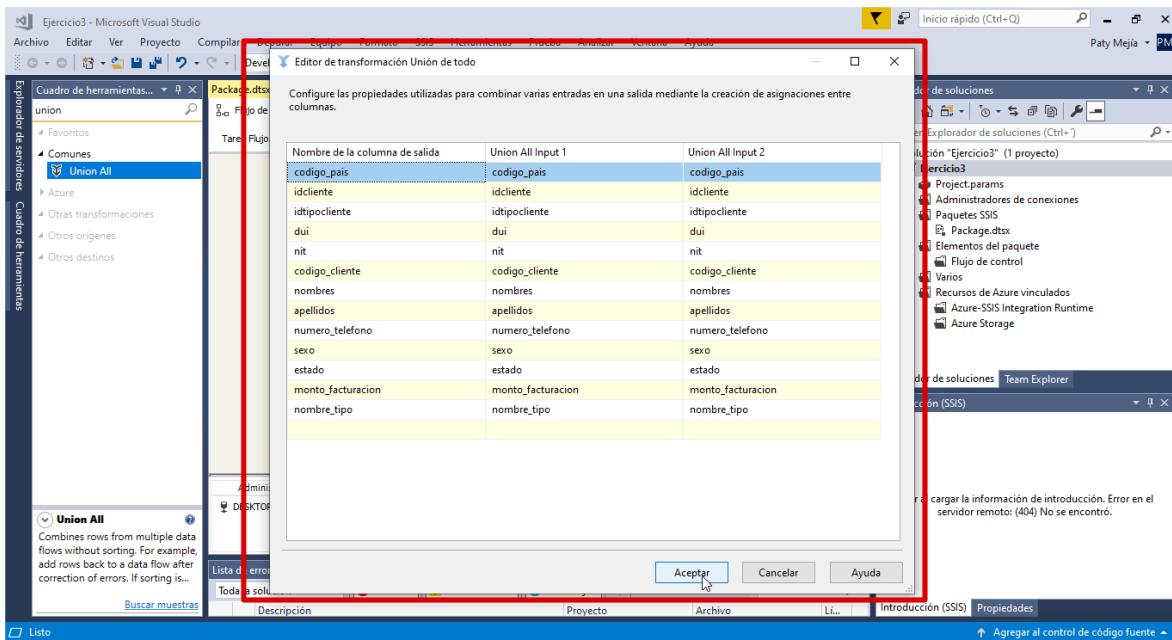
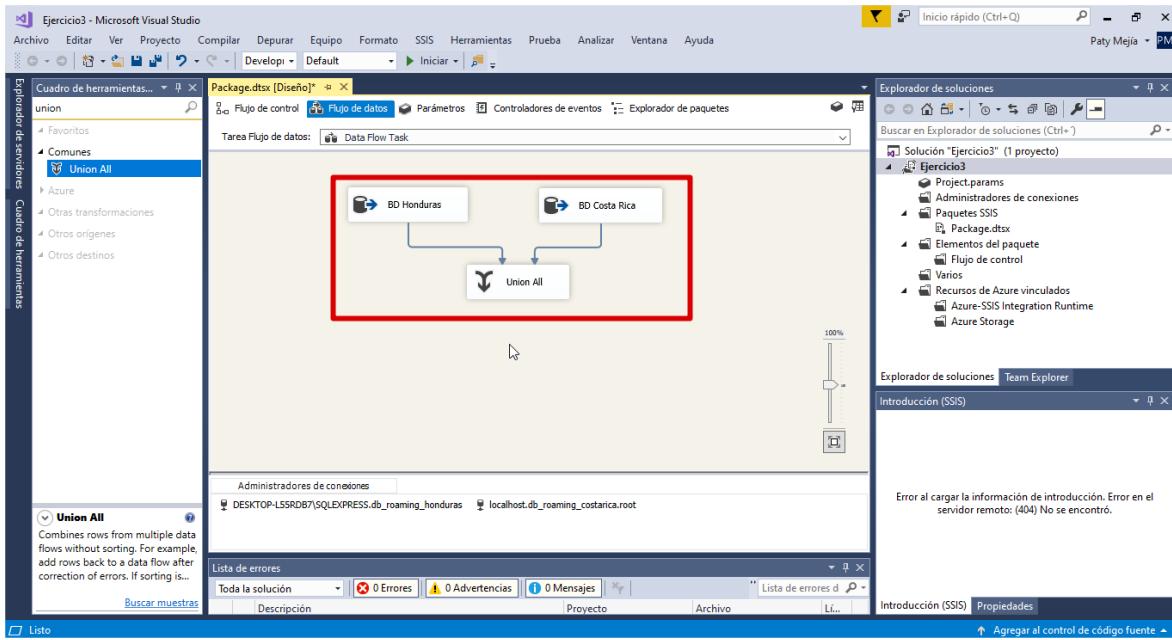




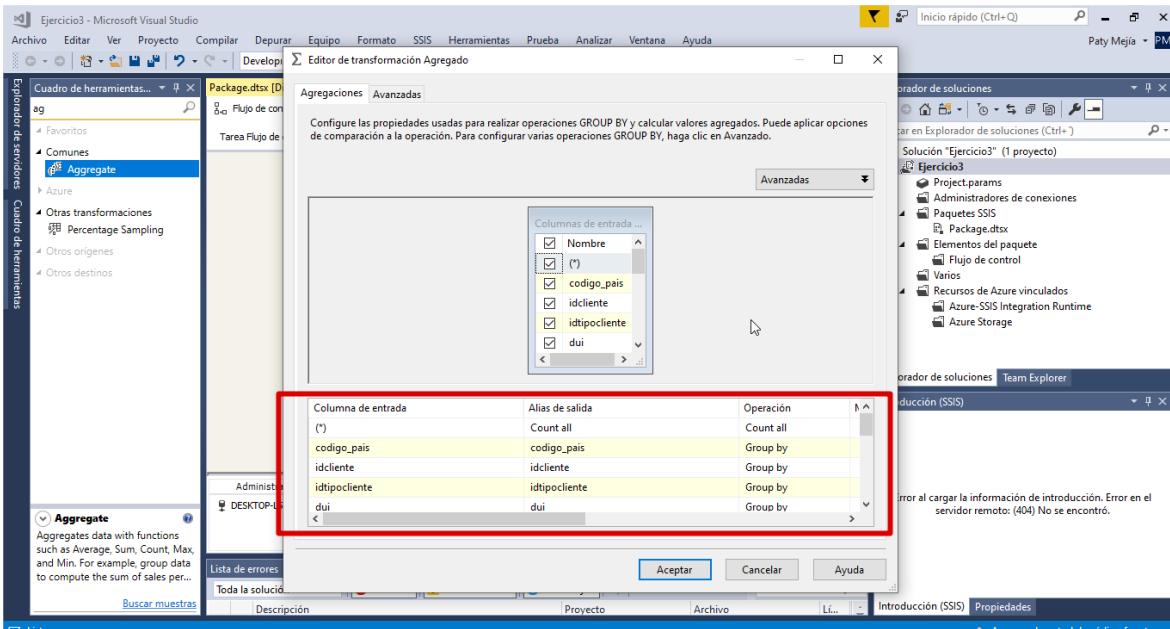
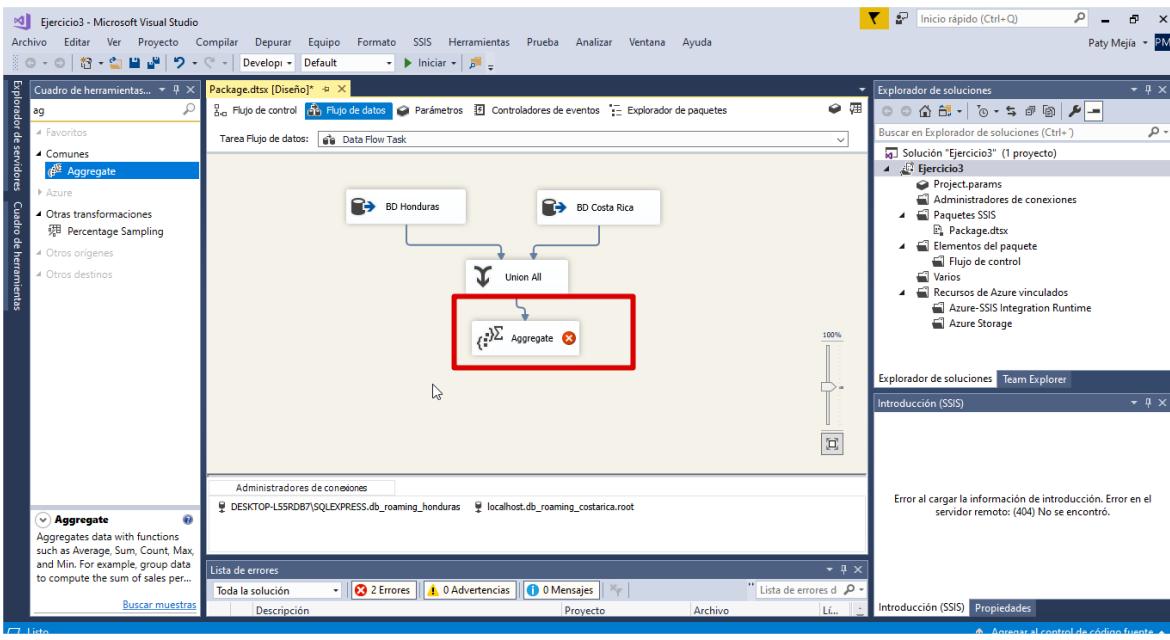


7. Se crea un UNION ALL para hacer una mezcla de ambas bases de datos.

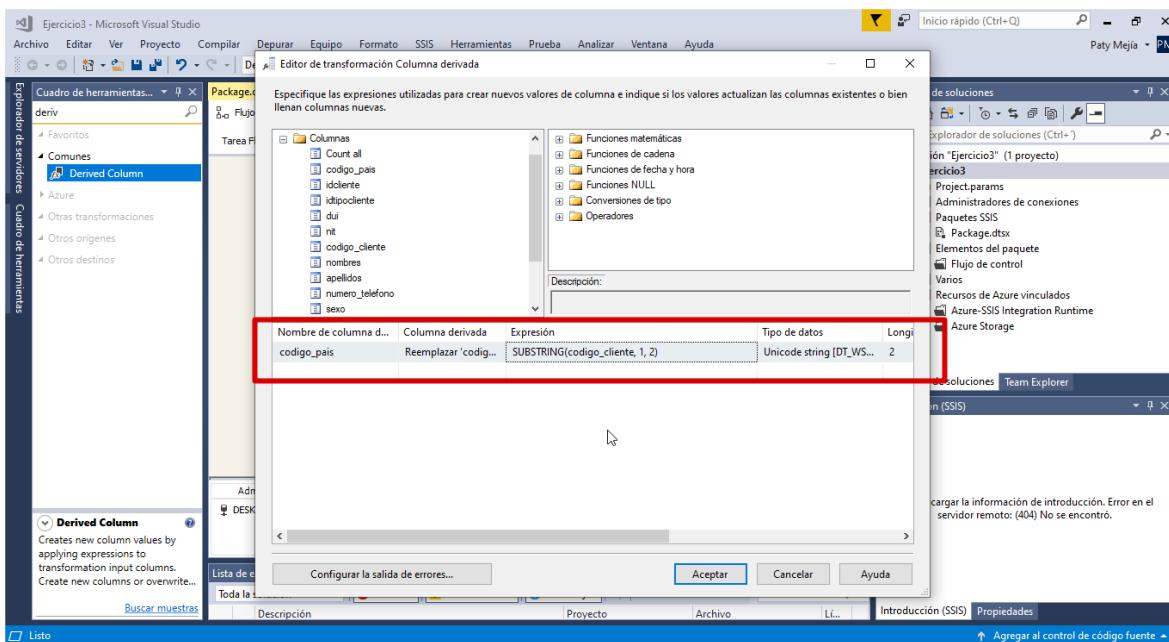
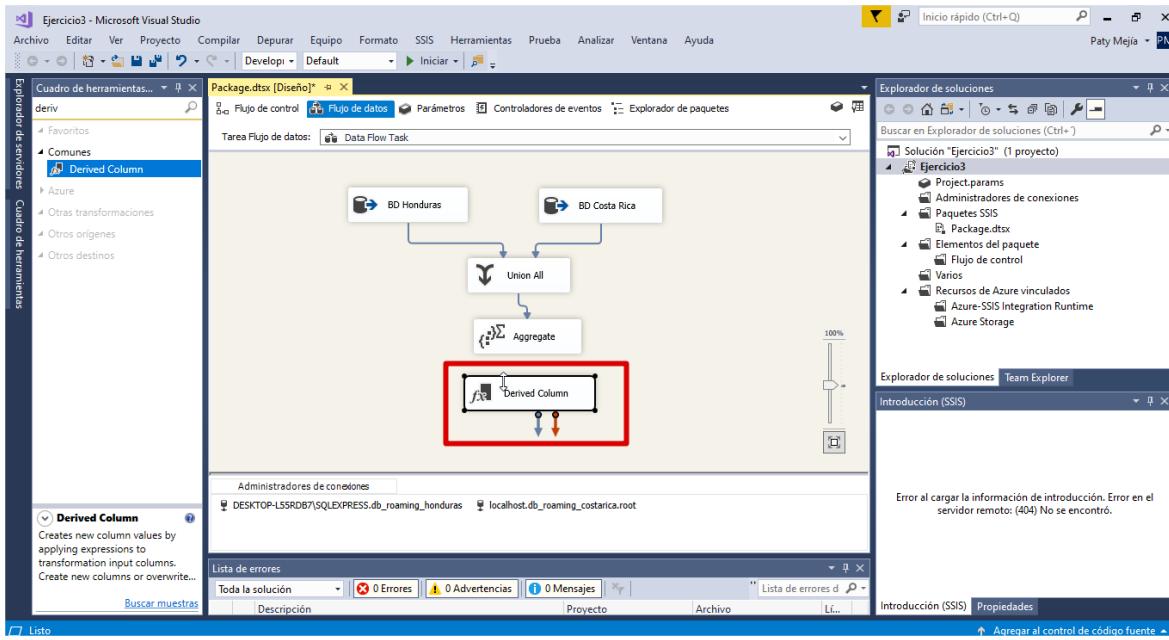




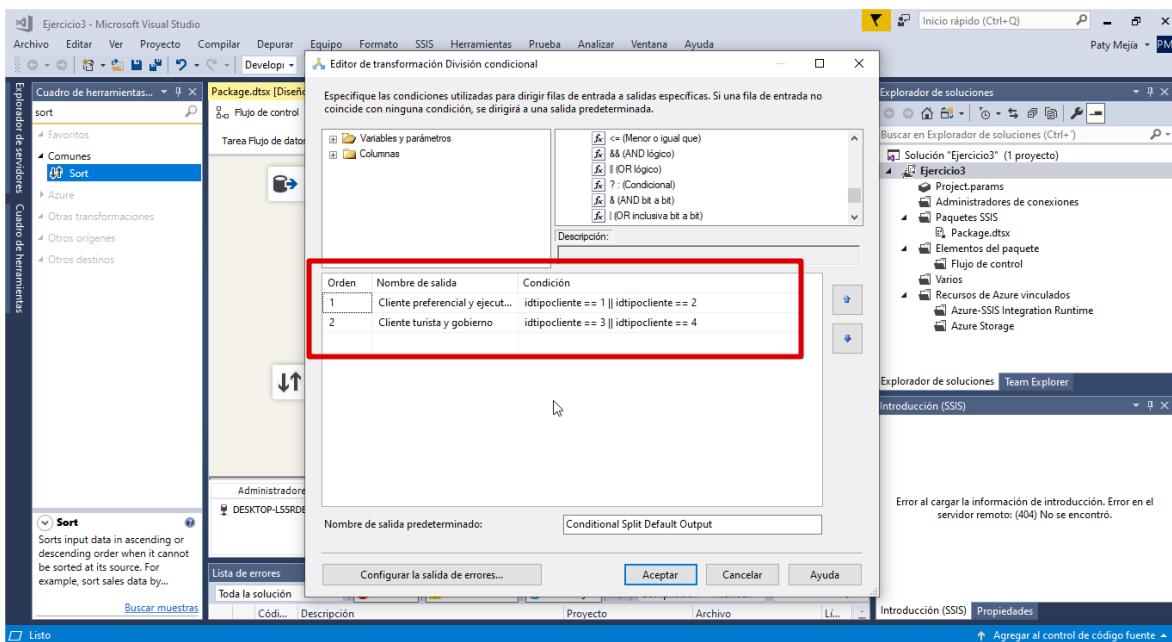
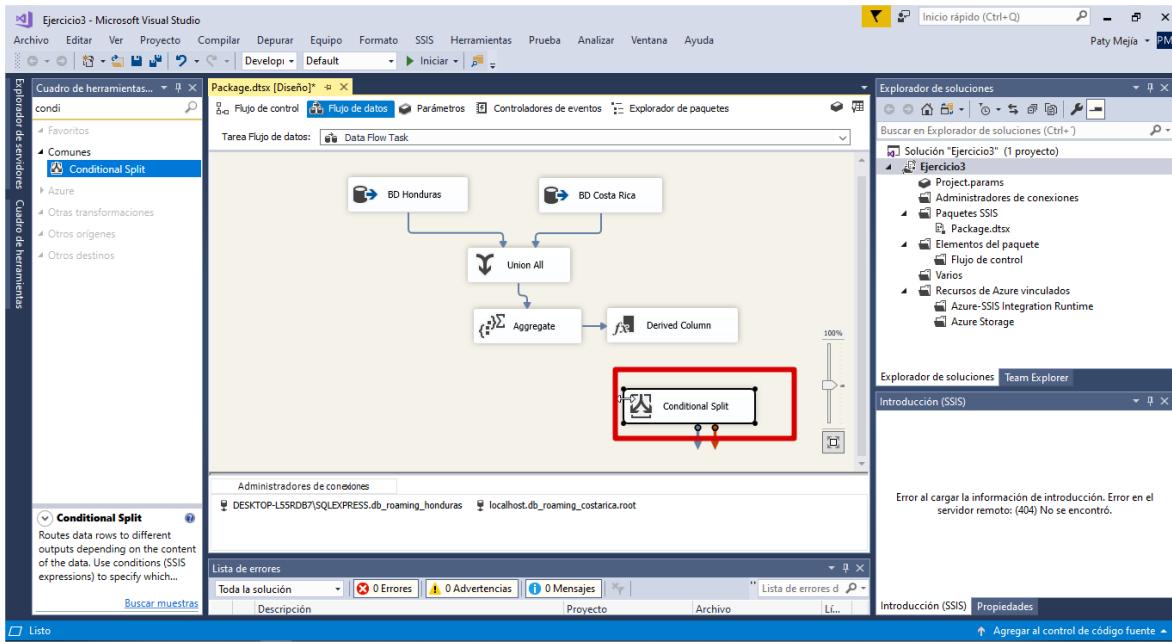
8. Se agrega un control para agrupar los datos de ambos orígenes.



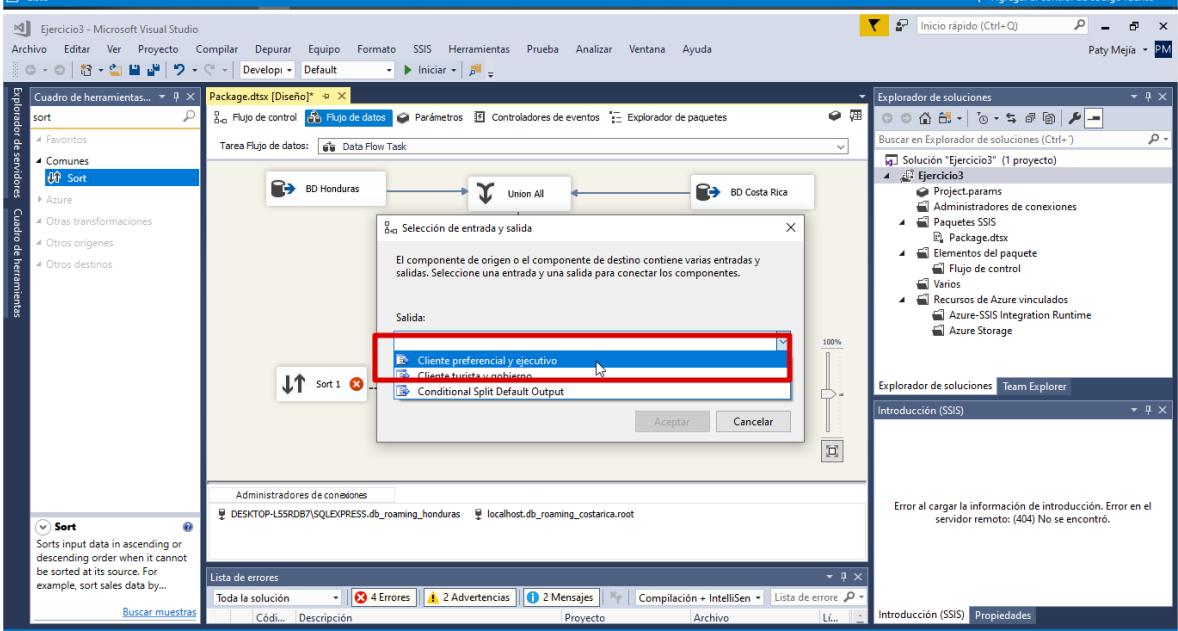
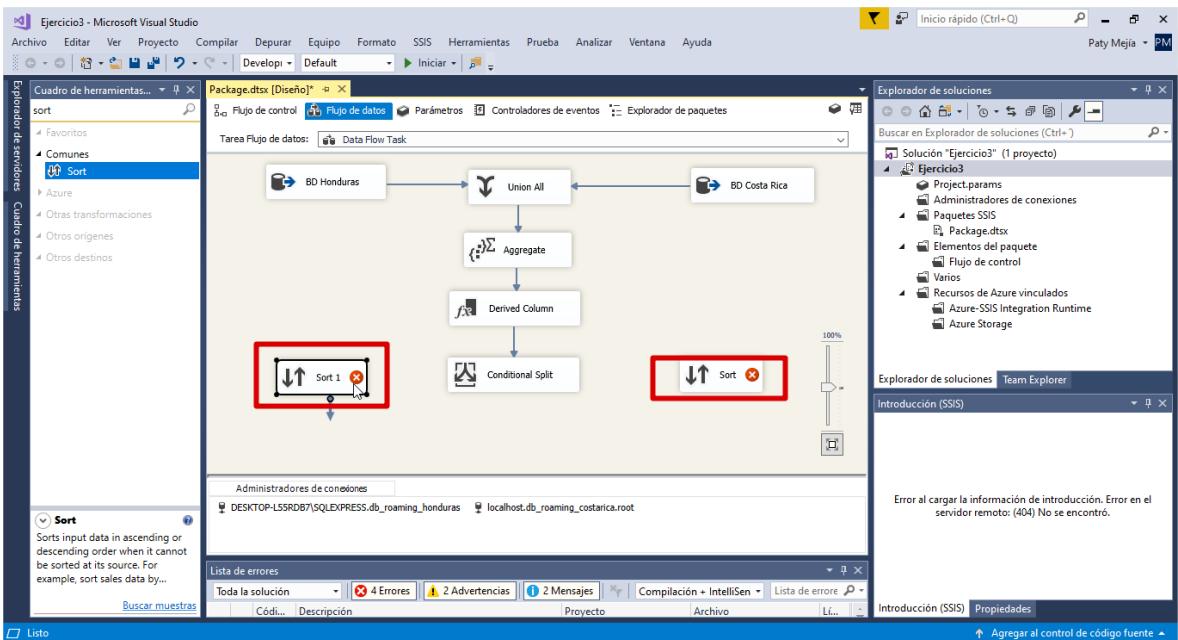
9. Se saca un elemento para extraer el código de país según las indicaciones.

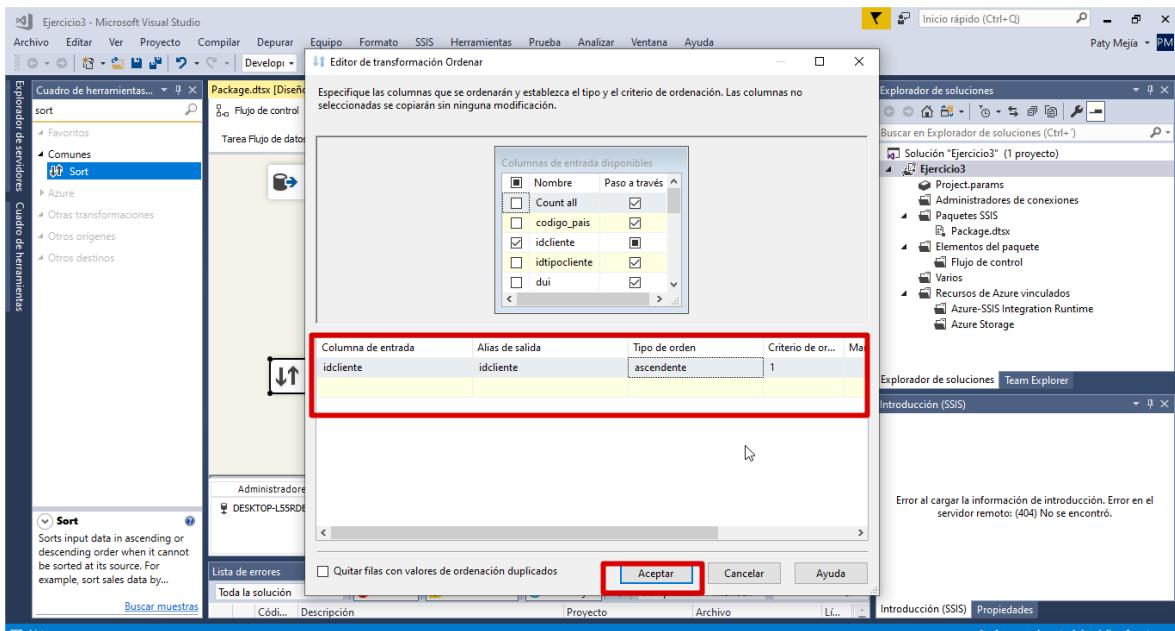
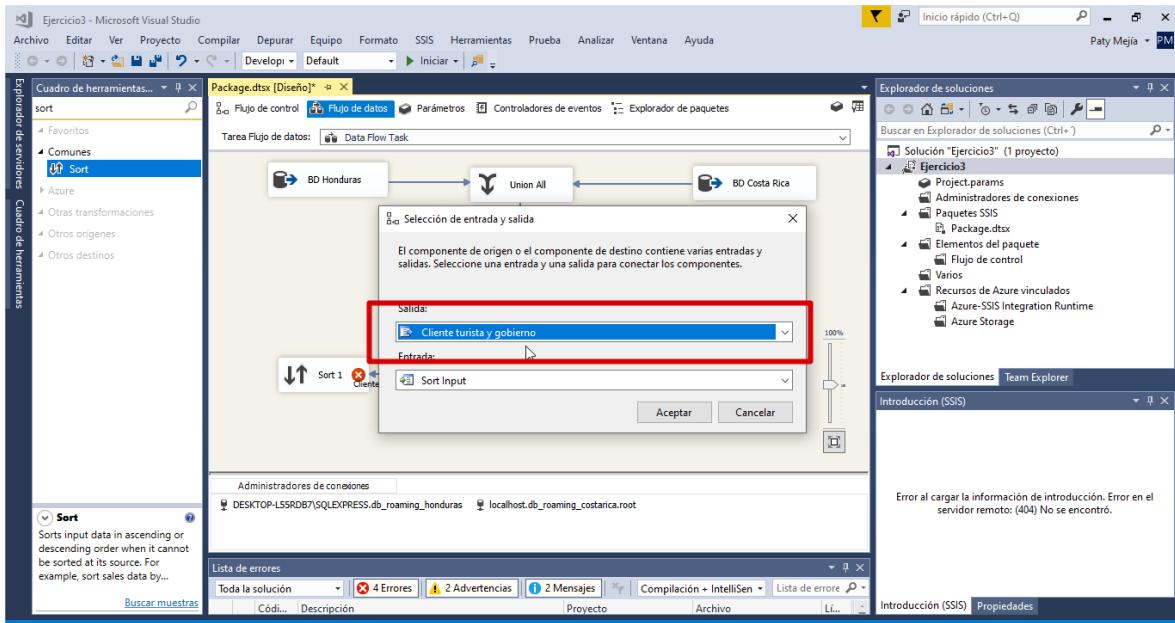


10. Se hace una separación de los clientes ejecutivos y preferenciales de los turistas y gubernamentales.

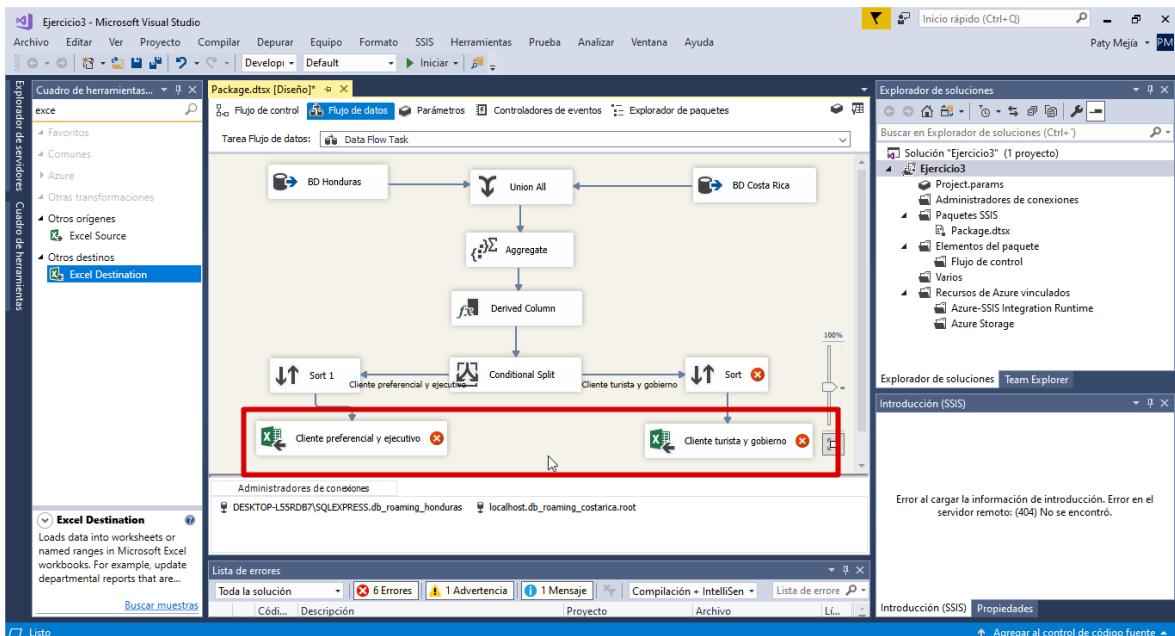
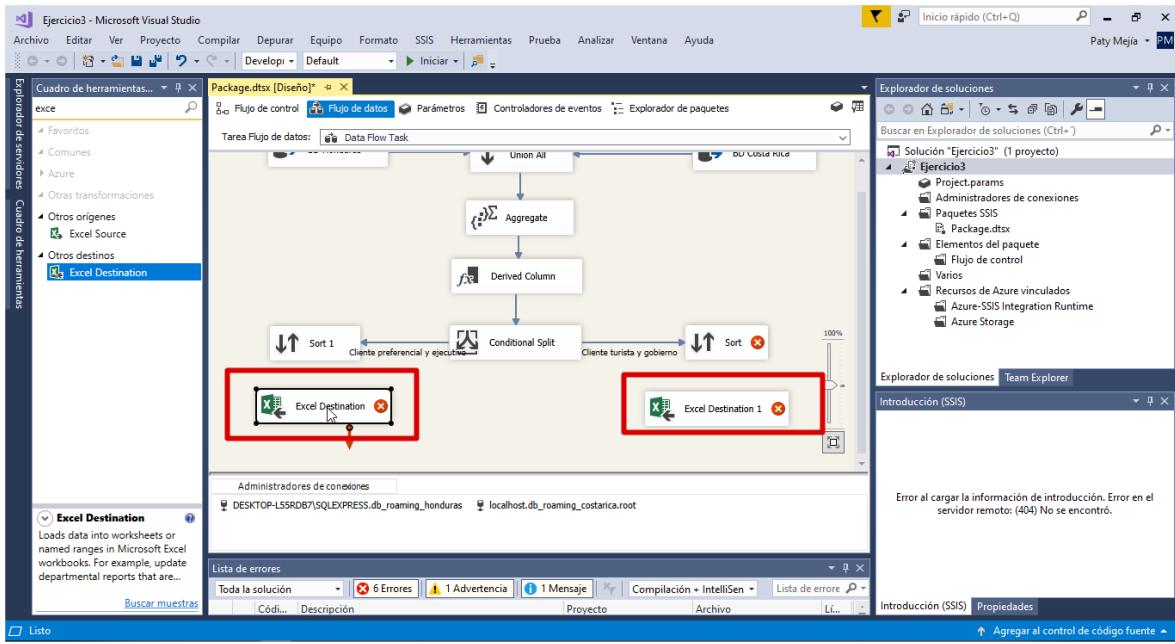


11. Se define el orden con el que se generarán los nuevos archivos filtrados.





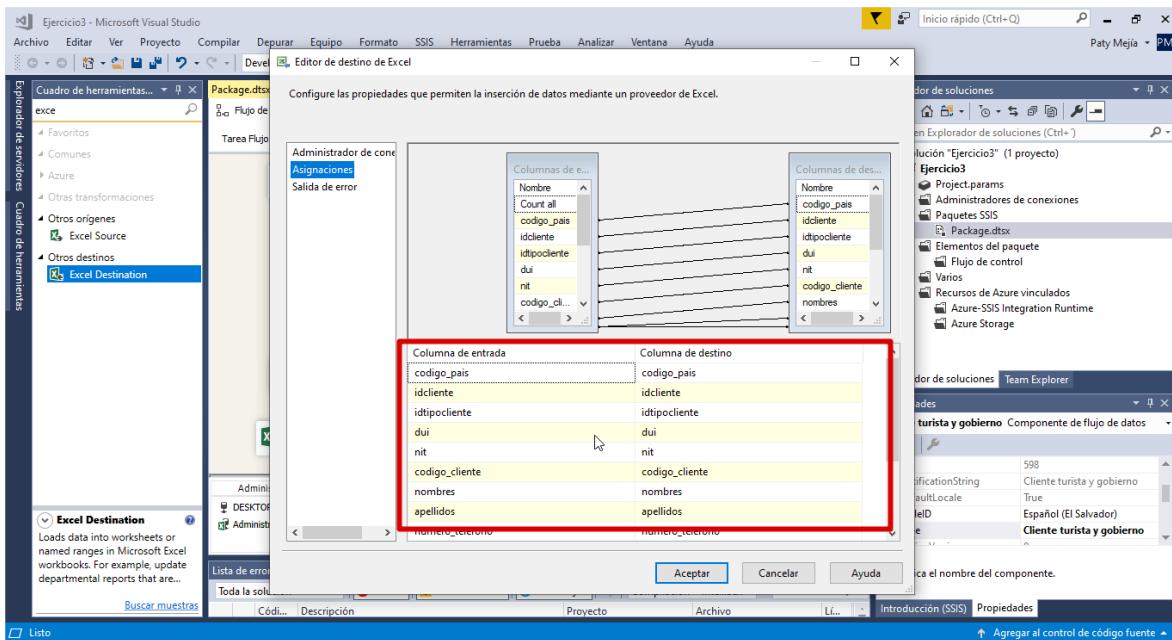
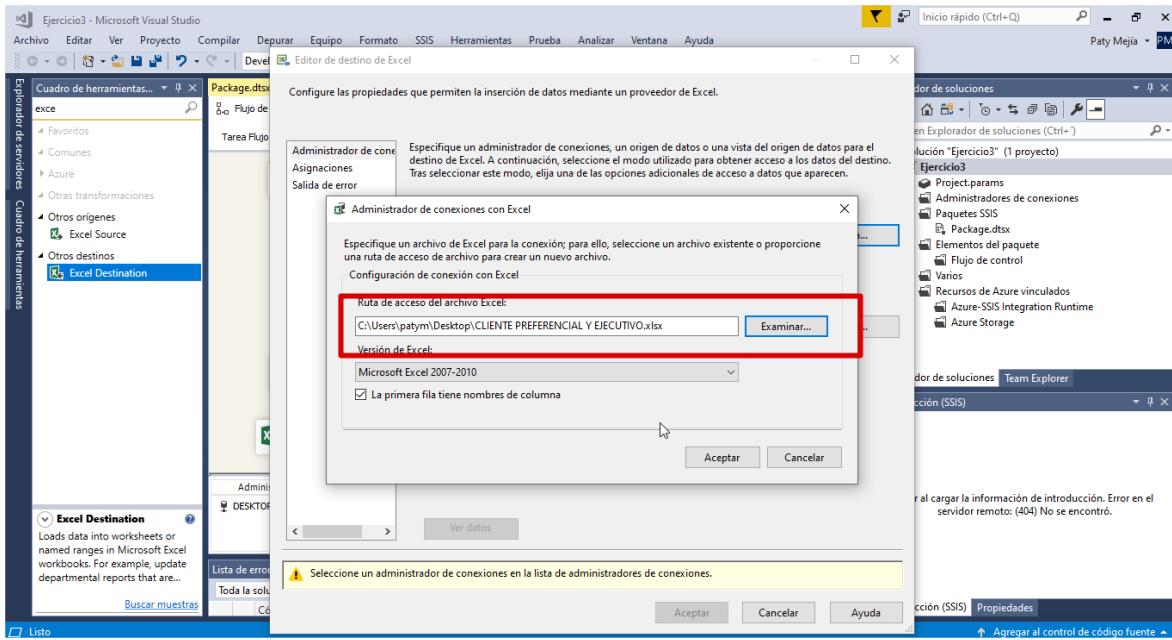
12. Se agregan los archivos excel en los que será volcada la información filtrada.

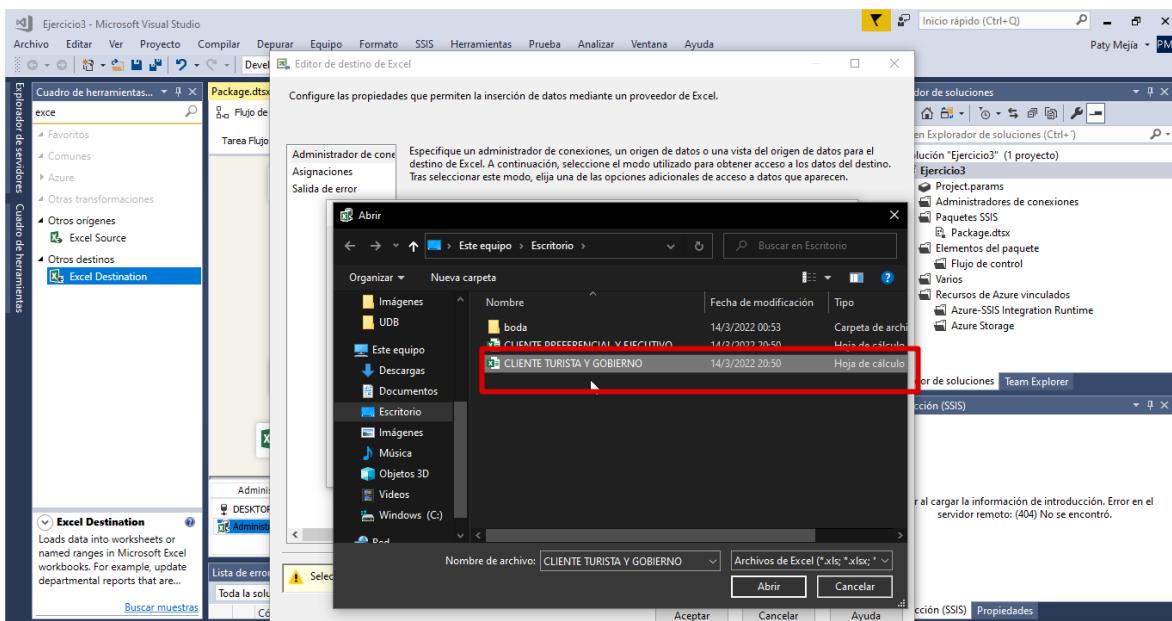
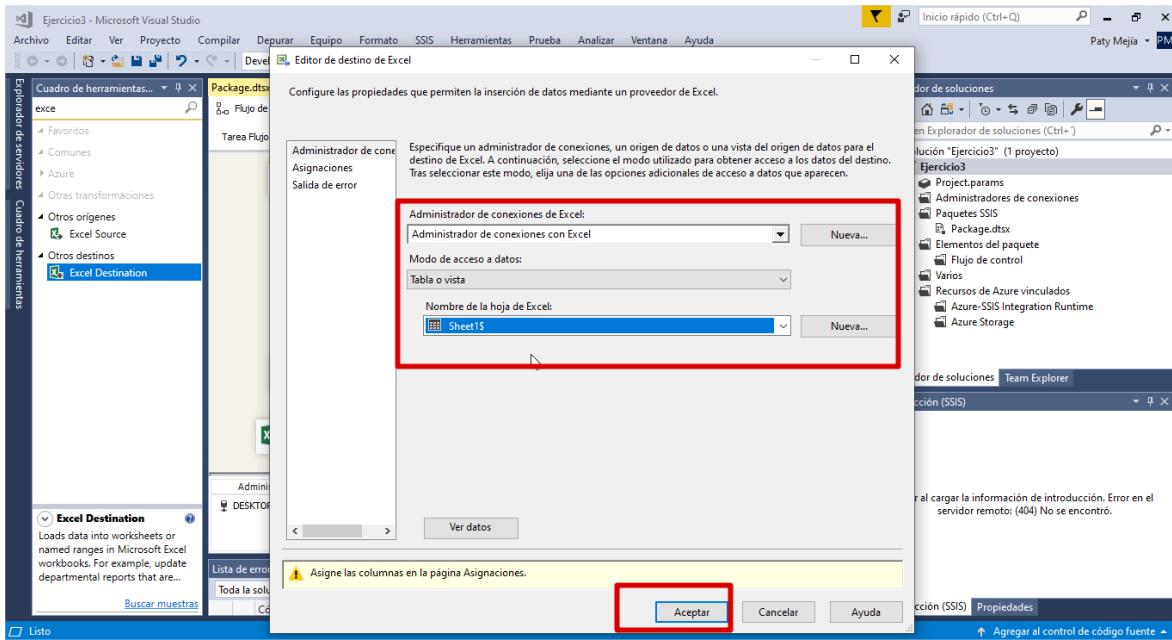


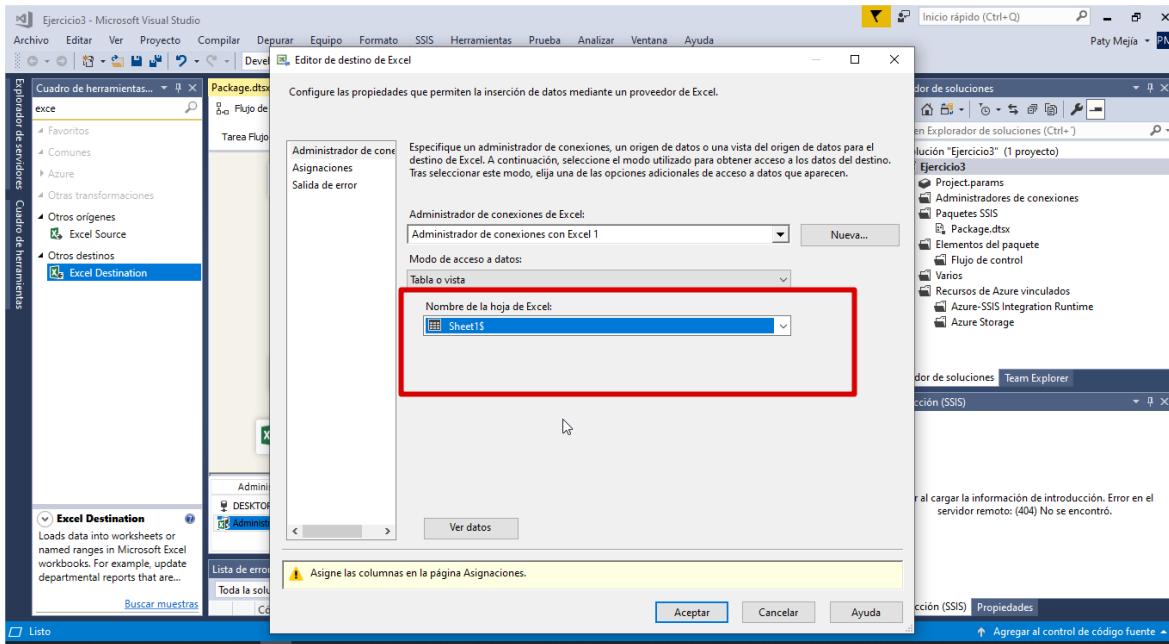
13. Se verifica que los archivos contengan las columnas de información que serán cargadas.



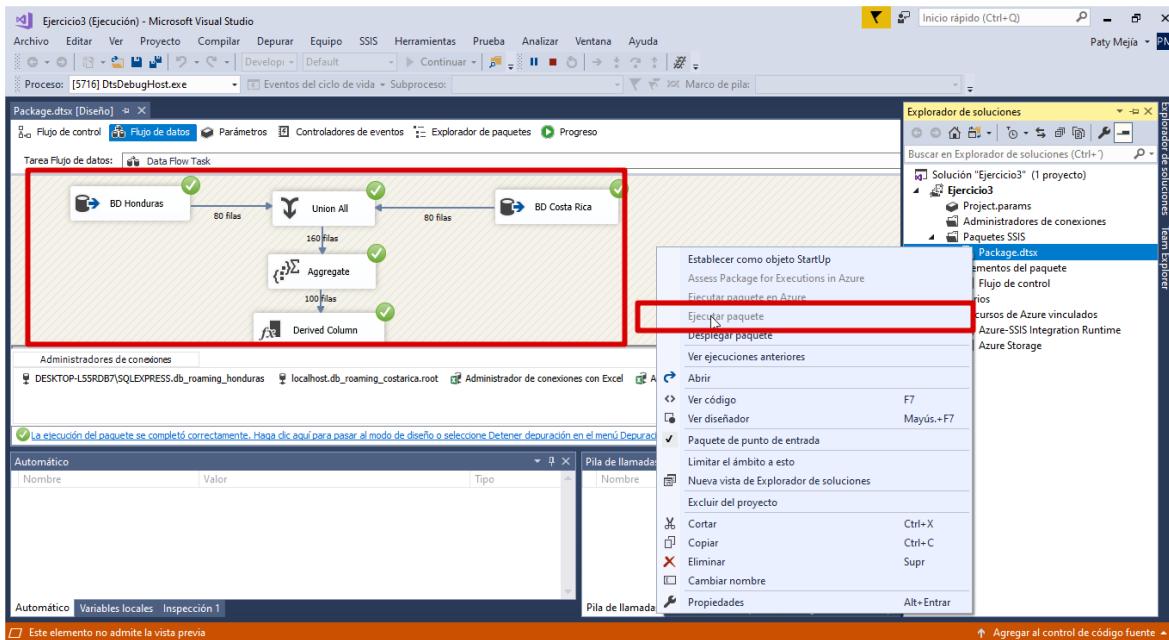
The screenshot shows a Microsoft Excel spreadsheet titled "CLIENTE PREFERENCIAL Y EJECUTIVO - Excel". The ribbon menu is visible at the top, with "Inicio" selected. The main area displays a table with 14 columns and 23 rows. The columns are labeled as follows: A (codigo_pais), B (idcliente), C (idtipocliente), D (dui), E (nuit), F (codigo_cliente), G (nombres), H (apellidos), I (numero_telefono), J (sexo), K (estado), L (monto_facturacion), M (nombre_tipo), and N (O). The first row contains these column labels. Row 9 is highlighted with a red box, and the cell at column D and row 9 is also highlighted with a green box. The status bar at the bottom left shows "Listo".

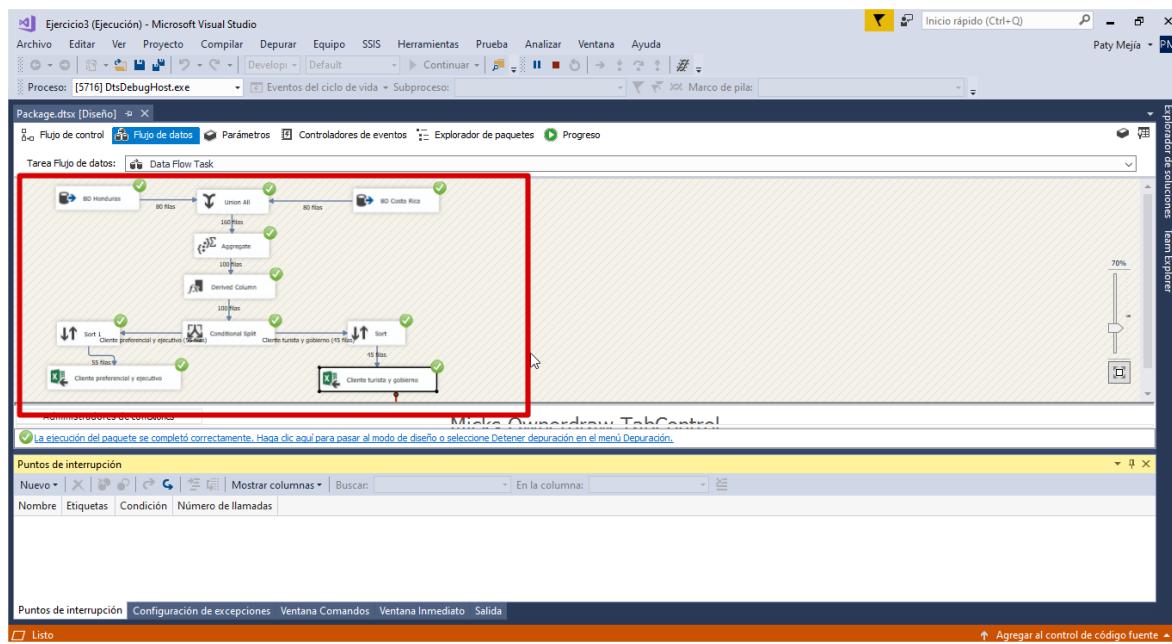






14. Se ejecuta el proceso.





15. Se validan los resultados obtenidos en los archivos excel.

CLIENTE TURISTA Y GOBIERNO - Excel

Paty Mejia

F7

sv-pw9858

codigo_pacidcliente	idtipocliente	dni	codigo_cli	nombres	apellidos	numero	t_sexo	estado	montofa	nombre_tipo
sv	166	4	01596533	021009116	sv-cm166	MARTA AL CABRERA	f	t	101.4	CLIENTE GUBERNAMENTAL
sv	215	4	00287394	021025016	sv-ra2158	ANA LIZ RODRIGUEZ	f	f	185.1	CLIENTE GUBERNAMENTAL
sv	215	4	00287394	021025016	sv-ra2158	ANA LIZ RODRIGUEZ	f	f	85.10	CLIENTE GUBERNAMENTAL
sv	374	3	019271511041112065	sv-ac3746	CARLOS A ARDON G	62789598	m	f	20.00	CLIENTE TURISTA
sv	589	4	00141561061009115	sv-ps5897	SALVADOR VASQUEZ	63335201	m	t	167.2	CLIENTE GUBERNAMENTAL
sv	985	4	001083386061721014	sv-pw9858	WALTER M PALACIOS	62272957	m	t	82.30	CLIENTE GUBERNAMENTAL
sv	164	4	029324227130725126	sv-on1642	NATIVIDA ORELLANA	62061046	f	t	60.90	CLIENTE GUBERNAMENTAL
sv	220	4	011308472112308047	sv-dy2208	YANIRI D DE LA O	75940982	f	t	45.30	CLIENTE GUBERNAMENTAL
sv	332	4	037696572061427076	sv-sh2320	HECTOR A SORIANO	77953576	m	t	102.6	CLIENTE GUBERNAMENTAL
sv	260	2	00481311670325036	sv-nj2608	JOSE ANTONIO NOLASCO	77109443	m	t	109.9	CLIENTE GUBERNAMENTAL
sv	272	0	022220442671108106	sv-ae2720	ELMER EN AREVALO	7853350	m	t	180.2	CLIENTE GUBERNAMENTAL
sv	476	1	02216998011226057	sv-cc4763	CARLOS A CASTRO A	65414440	m	t	42.80	CLIENTE GUBERNAMENTAL
sv	476	2	017998301061421037	sv-le4765	ERIC LOMI LEMUS ES	62849154	m	t	116.4	CLIENTE GUBERNAMENTAL
sv	476	2	017998301061421037	sv-le4765	ERIC LOMI LEMUS ES	62849154	m	t	16.40	CLIENTE GUBERNAMENTAL
sv	476	4	01945136061418107	sv-le4765	EVELYN EL LOPEZ DE	78332389	f	t	91.70	CLIENTE TURISTA
sv	476	5	023262697061417066	sv-mm476	MARITZA MELARA C	78332541	m	t	107.3	CLIENTE TURISTA
sv	476	7	008644581031205036	sv-dr4765	ROSSANA DIAZ DE C	74575307	f	t	141.9	CLIENTE TURISTA
sv	476	8	00374984061903017	sv-em476	MARVIN V ERAZO VA	77865956	m	f	46.70	CLIENTE TURISTA
sv	476	9	005574861020323036	sv-jj47659	JOSE RODRIGUEZ JIMENEZ	62634944	m	t	26.00	CLIENTE GUBERNAMENTAL
sv	476	0	011299271080512057	sv-gm4766	MANUEL E GRANDE	62845726	m	f	93.10	CLIENTE GUBERNAMENTAL
sv	476	1	034079691060906126	sv-ap4766	PEDRO AL AMAYA O	73910697	m	t	154.0	CLIENTE GUBERNAMENTAL
sv	476	2	039759691061224086	sv-lj47662	JORGE MA LOPEZ UR	78326391	m	t	102.9	CLIENTE TURISTA

II) Anexo

Ejercicio 1. Consultas SQL hechas.

Query	Utilidad
<pre>select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaCentro where Edad >=20 and Edad <30 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaCentro where Edad >=30 and Edad <60 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaCentro where Edad >=60</pre>	Segmentar las personas segun edad en 3 rangos en la Sucursal Centro.
<pre>select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >=20 and Edad <30 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >=30 and Edad <60 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaEscalon where Edad >=60</pre>	Segmentar las personas segun edad en 3 rangos en la Sucursal Escalón.
<pre>select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >=20 and Edad <30 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >=30 and Edad <60 select count(*) as SumatoriaJovenes, sum(Ingresos) as Ingresos, sum(PromVisit) as Visitas from dbo.SpaSantaTecla where Edad >=60</pre>	Segmentar las personas segun edad en 3 rangos en la Sucursal Santa Tecla.
<pre>select count(*) as Sexo1 from dbo.SpaCentro where Sexo = 0 select count(*) as Sexo2 from dbo.SpaCentro where Sexo = 1</pre>	Separar a las personas por sexo en sucusal Centro
<pre>select count(*) as Sauna from dbo.SpaCentro where Sauna = 1 and (Edad >= 30 and Edad < 60) select count(*) as Masaje from dbo.SpaCentro where Masaje = 1 and (Edad >= 30 and Edad < 60) select count(*) as Hidro from dbo.SpaCentro where Hidro = 1 and (Edad >= 30 and Edad < 60) select count(*) as Yoga from dbo.SpaCentro where Yoga = 1 and (Edad >= 30 and Edad < 60)</pre>	Conocer cual es el servicio más utilizado por los clientes mas frecuentes según rango de edad en sucursal Centro.
<pre>select count(*) as Sauna from dbo.SpaEscalon where Sauna = 1 and (Edad >= 30 and Edad < 60) select count(*) as Masaje from dbo.SpaEscalon where Masaje = 1 and (Edad >= 30 and Edad < 60) select count(*) as Hidro from dbo.SpaEscalon where Hidro = 1 and (Edad >= 30 and Edad < 60) select count(*) as Yoga from dbo.SpaEscalon where Yoga = 1 and (Edad >= 30 and Edad < 60)</pre>	Conocer cual es el servicio más utilizado por los clientes mas frecuentes según

	rango de edad en sucursal Escalón.
<pre>select count(*) as Sauna from dbo.SpaSantaTecla where Sauna = 1 and (Edad >= 30 and Edad < 60) select count(*) as Masaje from dbo.SpaSantaTecla where Masaje = 1 and (Edad >= 30 and Edad < 60) select count(*) as Hidro from dbo.SpaSantaTecla where Hidro = 1 and (Edad >= 30 and Edad < 60) select count(*) as Yoga from dbo.SpaSantaTecla where Yoga = 1 and (Edad >= 30 and Edad < 60)</pre>	Conocer cual es el servicio más utilizado por los clientes mas frecuentes según rango de edad en sucursal Santa Tecla.

Ejercicio 2. Consultas SQL hechas.

Query	Utilidad
<pre>select count(Rosas) as Rosas from dbo.SanMiguel where Rosas = 1 select count(Claveles) as Claveles from dbo.SanMiguel where Claveles = 1 select count(Girasoles) as Girasoles from dbo.SanMiguel where Girasoles = 1 select count(Hortensia) as Hortensias from dbo.SanMiguel where Hortensia = 1 select count(Orquideas) as Orquideas from dbo.SanMiguel where Orquideas = 1 select count(Carmesi) as Carmesi from dbo.SanMiguel where Carmesi = 1 select count(Lirios) as Lirios from dbo.SanMiguel where Lirios = 1 select count(Aurora) as Aurora from dbo.SanMiguel where Aurora = 1 select count(Tulipanes) as Tulipanes from dbo.SanMiguel where Tulipanes = 1 select count(Macetas) as Macetas from dbo.SanMiguel where Macetas = 1 select count(Tierra) as Tierra from dbo.SanMiguel where Tierra = 1 select count(Globos) as Globos from dbo.SanMiguel where Globos = 1 select count(Tarjetas) as Tarjetas from dbo.SanMiguel where Tarjetas = 1 select count(Liston) as Liston from dbo.SanMiguel where Liston = 1</pre>	Conocer la sumatoria de los productos vendidos para poder determinar cual es el mas vendido en San Miguel.
<pre>select count(Rosas) as Rosas from dbo.SanSalvador where Rosas = 1 select count(Claveles) as Claveles from dbo.SanSalvador where Claveles = 1 select count(Girasoles) as Girasoles from dbo.SanSalvador where Girasoles = 1 select count(Hortensia) as Hortensias from dbo.SanSalvador where Hortensia = 1 select count(Orquideas) as Orquideas from dbo.SanSalvador where Orquideas = 1 select count(Carmesi) as Carmesi from dbo.SanSalvador where Carmesi = 1 select count(Lirios) as Lirios from dbo.SanSalvador where Lirios = 1 select count(Aurora) as Aurora from dbo.SanSalvador where Aurora = 1 select count(Tulipanes) as Tulipanes from dbo.SanSalvador where Tulipanes = 1 select count(Macetas) as Macetas from dbo.SanSalvador where Macetas = 1 select count(Tierra) as Tierra from dbo.SanSalvador where Tierra = 1 select count(Globos) as Globos from dbo.SanSalvador where Globos = 1 select count(Tarjetas) as Tarjetas from dbo.SanSalvador where Tarjetas = 1</pre>	Conocer la sumatoria de los productos vendidos para poder determinar cual es el mas vendido en San Salvador.

<pre>select count(Liston) as Liston from dbo.SanSalvador where Liston = 1 select count(Rosas) as Rosas from dbo.SantaAna where Rosas = 1 select count(Claveles) as Claveles from dbo.SantaAna where Claveles = 1 select count(Girasoles) as Girasoles from dbo.SantaAna where Girasoles = 1 select count(Hortensia) as Hortensias from dbo.SantaAna where Hortensia = 1 select count(Orquideas) as Orquideas from dbo.SantaAna where Orquideas = 1 select count(Carmesi) as Carmesi from dbo.SantaAna where Carmesi = 1 select count(Lirios) as Lirios from dbo.SantaAna where Lirios = 1 select count(Aurora) as Aurora from dbo.SantaAna where Aurora = 1 select count(Tulipanes) as Tulipanes from dbo.SantaAna where Tulipanes = 1 select count(Macetas) as Macetas from dbo.SantaAna where Macetas = 1 select count(Tierra) as Tierra from dbo.SantaAna where Tierra = 1 select count(Globos) as Globos from dbo.SantaAna where Globos = 1 select count(Tarjetas) as Tarjetas from dbo.SantaAna where Tarjetas = 1 select count(Liston) as Liston from dbo.SantaAna where Liston = 1</pre>	<p>Conocer la sumatoria de los productos vendidos para poder determinar cual es el mas vendido en Santa Ana.</p>
<pre>SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] FROM [FloristeriaFiorella].[dbo].[SanMiguel] group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] having count(*) > 1</pre>	<p>Encontrar las combinaciones mas vendidas en San Miguel.</p>
<pre>SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] FROM [FloristeriaFiorella].[dbo].[SanSalvador] group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] having count(*) > 1</pre>	<p>Encontrar las combinaciones mas vendidas en San Salvador.</p>
<pre>SELECT [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] FROM [FloristeriaFiorella].[dbo].[SantaAna] group by [Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos], [Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston] having count(*) > 1</pre>	<p>Encontrar las combinaciones mas vendidas en Santa Ana.</p>
<pre>select count(ventasSV.Rosas) as Rosas from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV where ventasSV.Rosas = 1 group by ventasSV.Rosas select count(ventasSV.Claveles) as Claveles from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV where ventasSV.Claveles = 1 group by ventasSV.Claveles select count(ventasSV.Girasoles) as Girasoles from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV where ventasSV.Girasoles = 1 group by ventasSV.Girasoles select count(ventasSV.Hortensia) as Hortensias from (select * from dbo.SanMiguel union all select * from dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV where ventasSV.Hortensia = 1 group by ventasSV.Hortensia select count(ventasSV.Orquideas) as Orquideas</pre>	<p>Conocer la sumatoria de los productos vendidos para poder determinar cual es el mas vendido en todo el pais.</p>

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from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Orquideas = 1
group by ventasSV.Orquideas

select count(ventasSV.Carmesi) as Carmesi
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Carmesi = 1
group by ventasSV.Carmesi

select count(ventasSV.Lirios) as Lirios
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Lirios = 1
group by ventasSV.Lirios

select count(ventasSV.Aurora) as Auroras
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Aurora = 1
group by ventasSV.Aurora

select count(ventasSV.Tulipanes) as Tulipanes
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Tulipanes = 1
group by ventasSV.Tulipanes

select count(ventasSV.Macetas) as Macetas
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Macetas = 1
group by ventasSV.Macetas

select count(ventasSV.Tierra) as Tierra
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Tierra = 1
group by ventasSV.Tierra

select count(ventasSV.Globos) as Globos
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Globos = 1
group by ventasSV.Globos

select count(ventasSV.Tarjetas) as Tarjetas
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Tarjetas = 1
group by ventasSV.Tarjetas

select count(ventasSV.Liston) as Liston
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
where ventasSV.Liston = 1
group by ventasSV.Liston

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SELECT
[Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],
[Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
from (select * from dbo.SanMiguel union all select * from
dbo.SanSalvador union all select * from dbo.SantaAna) as ventasSV
group by
[Rosas],[Claveles],[Macetas],[Tierra],[Girasoles],[Hortensia],[Globos],
[Tarjetas],[Orquideas],[Carmesi],[Lirios],[Aurora],[Tulipanes],[Liston]
having count(*) > 3

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Encontrar la combinación mas vendida en el país.