

Presentación



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Materia: Electiva 1

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Tema: Carga de Fact Tables

Fecha: 29/11/2024



ASIGNACION

Se requiere realizar la carga de las siguientes fact's de su [base de datos](#) DataWarehouse.

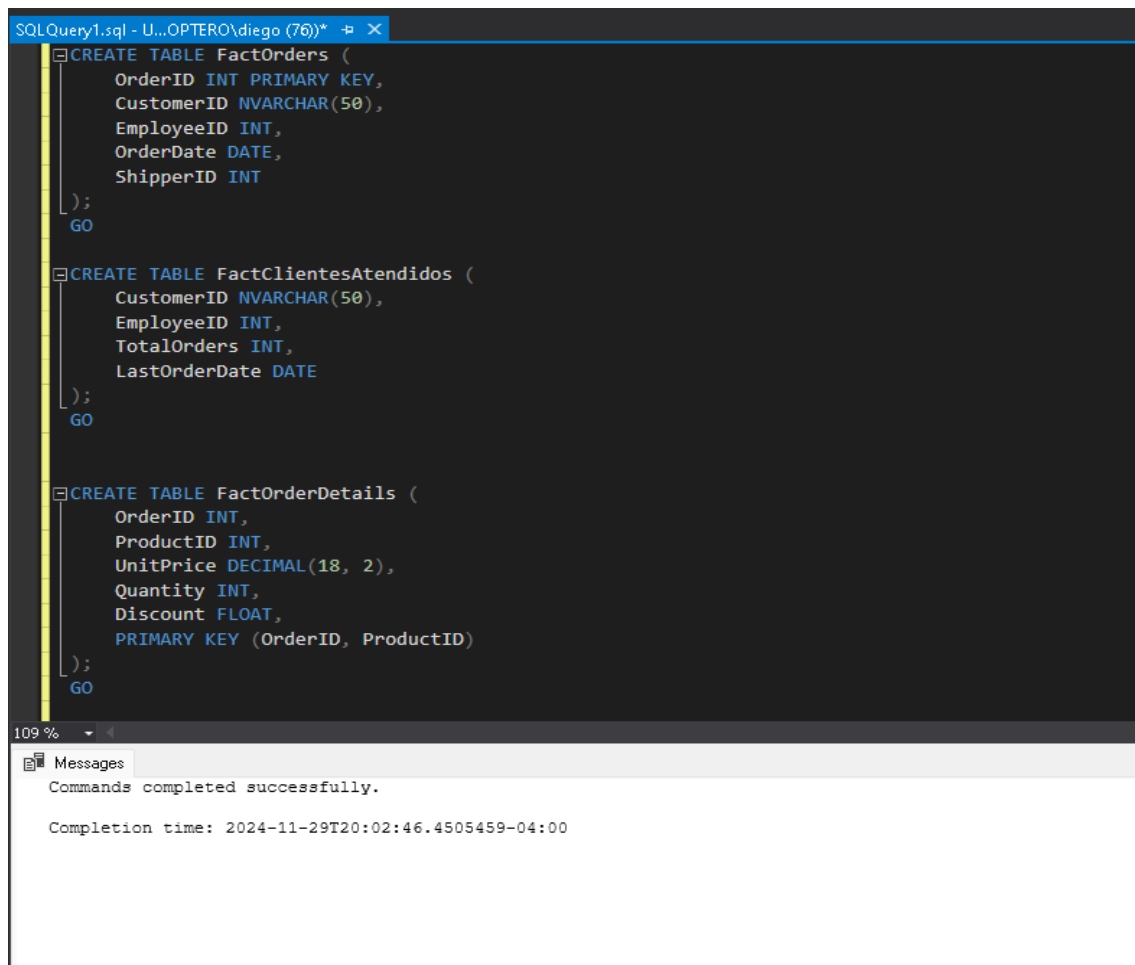
- FactOrders,
- Fact de clientes atendidos.
- Fact de orders details, si la tiene creada.

Nota: Antes de cargar estas fact tables deben de crear un proceso que permita limpiar las tablas antes de cargarlas.

Deben de subir un documento pdf con la descripción de su proceso debidamente funcional como se muestra en el documento adjunto con la descripción de cada una de la tablas cargadas.

El informe debe incluir el enlace de github para su revisión.

1 - Creamos las tablas en caso de no tenerlas



The screenshot shows a SQL Server Enterprise Manager window with the title 'SQLQuery1.sql - U...OPTERO\diego (76)*'. The main pane displays three SQL commands to create tables. The first command creates 'FactOrders' with columns: OrderID (INT, PRIMARY KEY), CustomerID (NVARCHAR(50)), EmployeeID (INT), OrderDate (DATE), and ShipperID (INT). The second command creates 'FactClientesAtendidos' with columns: CustomerID (NVARCHAR(50)), EmployeeID (INT), TotalOrders (INT), and LastOrderDate (DATE). The third command creates 'FactOrderDetails' with columns: OrderID (INT), ProductID (INT), UnitPrice (DECIMAL(18, 2)), Quantity (INT), Discount (FLOAT), and a PRIMARY KEY on (OrderID, ProductID). Each command is followed by a semicolon and 'GO'. The bottom pane, titled 'Messages', shows the message 'Commands completed successfully.' and the completion time '2024-11-29T20:02:46.4505459-04:00'.

```
CREATE TABLE FactOrders (
    OrderID INT PRIMARY KEY,
    CustomerID NVARCHAR(50),
    EmployeeID INT,
    OrderDate DATE,
    ShipperID INT
);
GO

CREATE TABLE FactClientesAtendidos (
    CustomerID NVARCHAR(50),
    EmployeeID INT,
    TotalOrders INT,
    LastOrderDate DATE
);
GO

CREATE TABLE FactOrderDetails (
    OrderID INT,
    ProductID INT,
    UnitPrice DECIMAL(18, 2),
    Quantity INT,
    Discount FLOAT,
    PRIMARY KEY (OrderID, ProductID)
);
GO
```

109 %

Messages

Commands completed successfully.

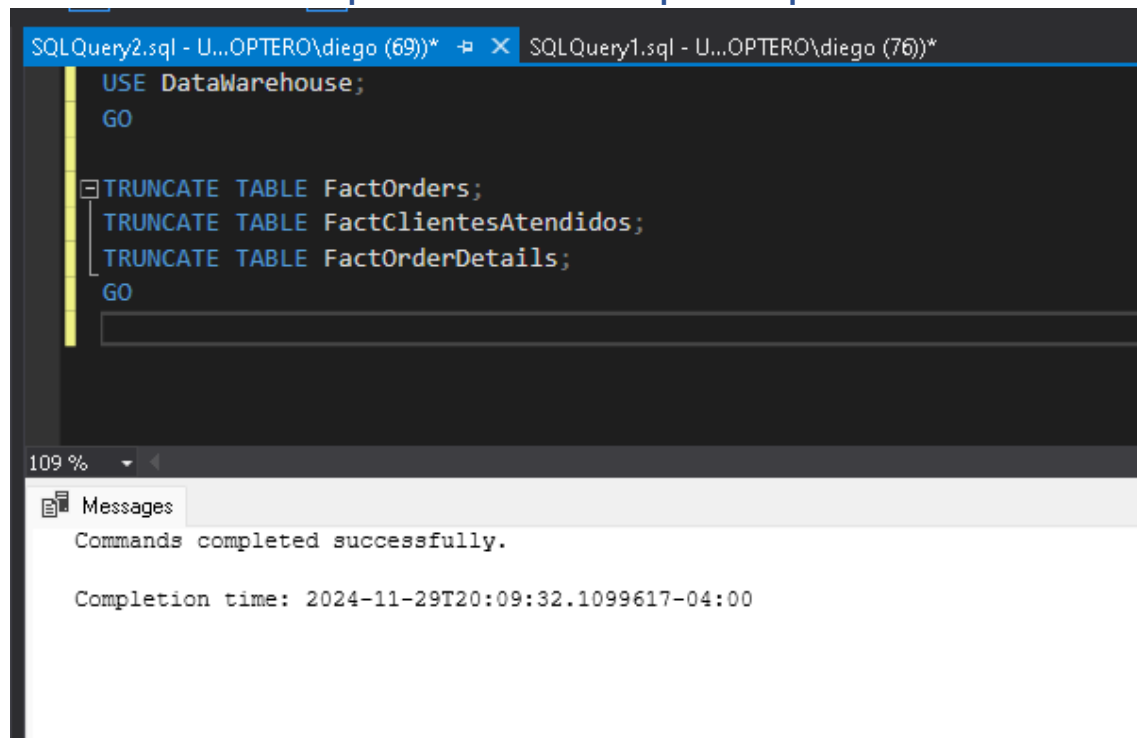
Completion time: 2024-11-29T20:02:46.4505459-04:00

```
CREATE TABLE FactOrders (
    OrderID INT PRIMARY KEY,
    CustomerID NVARCHAR(50),
    EmployeeID INT,
    OrderDate DATE,
    ShipperID INT
);
GO

CREATE TABLE FactClientesAtendidos (
    CustomerID NVARCHAR(50),
    EmployeeID INT,
    TotalOrders INT,
    LastOrderDate DATE
);
GO

CREATE TABLE FactOrderDetails (
    OrderID INT,
    ProductID INT,
    UnitPrice DECIMAL(18, 2),
    Quantity INT,
    Discount FLOAT,
    PRIMARY KEY (OrderID, ProductID)
);
GO
```

2 - Hacemos el proceso de limpieza por si acaso



The screenshot shows a SQL Server Enterprise Manager window with two tabs: 'SQLQuery2.sql - U...OPTERO\diego (69)*' and 'SQLQuery1.sql - U...OPTERO\diego (76)*'. The active tab displays the following SQL script:

```
USE DataWarehouse;  
GO  
  
TRUNCATE TABLE FactOrders;  
TRUNCATE TABLE FactClientesAtendidos;  
TRUNCATE TABLE FactOrderDetails;  
GO
```

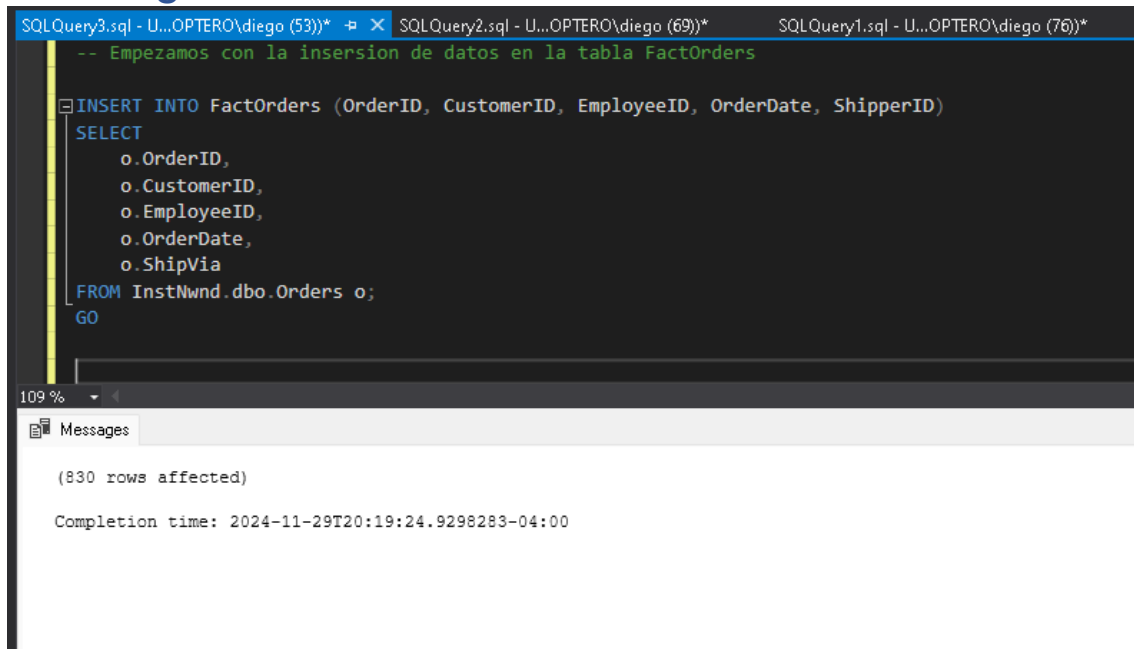
Below the script editor, the 'Messages' pane shows the execution results:

```
Commands completed successfully.  
  
Completion time: 2024-11-29T20:09:32.1099617-04:00
```

```
USE DataWarehouse;  
GO
```

```
TRUNCATE TABLE FactOrders;  
TRUNCATE TABLE FactClientesAtendidos;  
TRUNCATE TABLE FactOrderDetails;  
GO
```

3 - Cargando FactOrders al DataWarehouse



The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are three tabs: 'SQLQuery3.sql - U...OPTERO\diego (53))*', 'SQLQuery2.sql - U...OPTERO\diego (69))*', and 'SQLQuery1.sql - U...OPTERO\diego (76))*'. The active window is 'SQLQuery3.sql', which contains the following SQL code:

```
-- Empezamos con la insercion de datos en la tabla FactOrders

INSERT INTO FactOrders (OrderID, CustomerID, EmployeeID, OrderDate, ShipperID)
SELECT
    o.OrderID,
    o.CustomerID,
    o.EmployeeID,
    o.OrderDate,
    o.ShipVia
FROM InstNwnd.dbo.Orders o;
GO
```

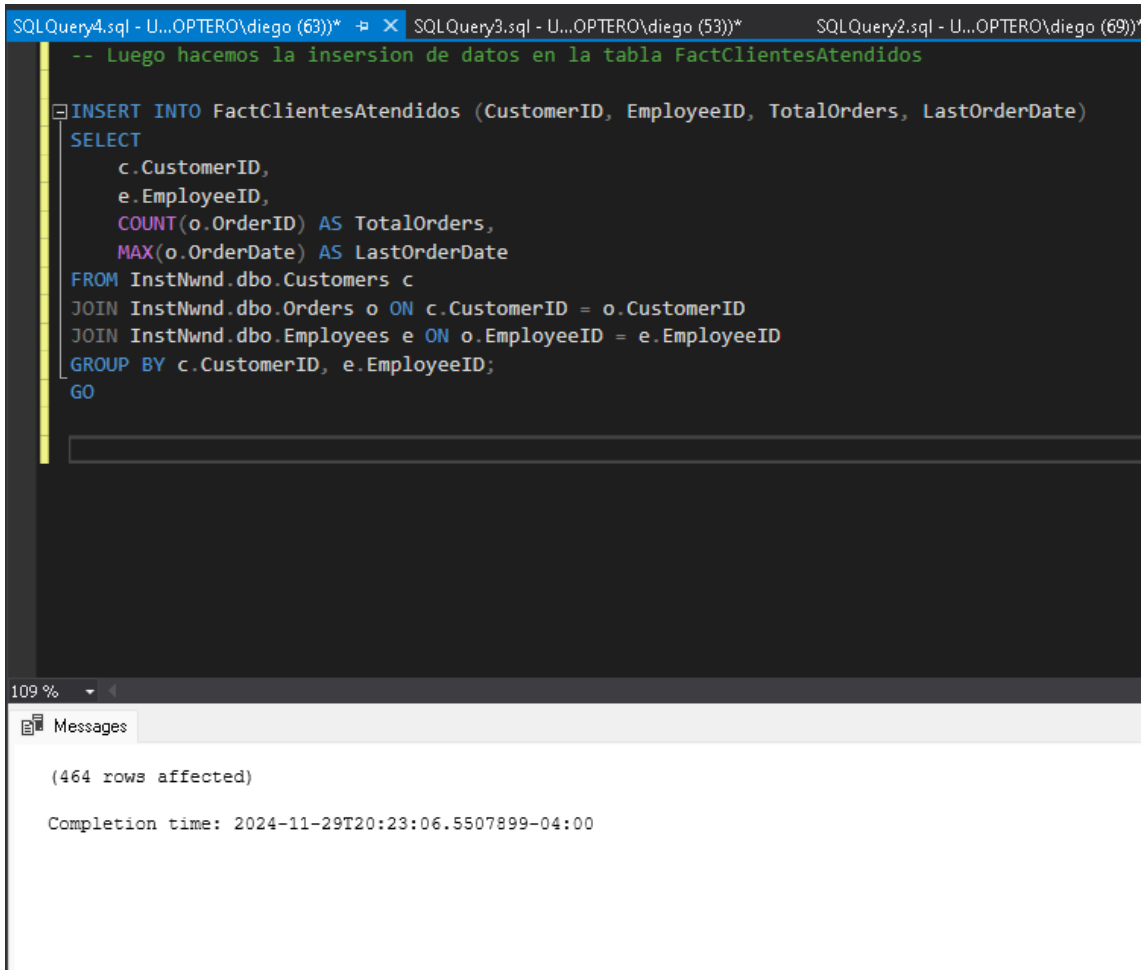
Below the query window, there is a 'Messages' window showing the execution results:

```
(830 rows affected)

Completion time: 2024-11-29T20:19:24.9298283-04:00
```

```
INSERT INTO FactOrders (OrderID, CustomerID, EmployeeID, OrderDate, ShipperID)
SELECT
    o.OrderID,
    o.CustomerID,
    o.EmployeeID,
    o.OrderDate,
    o.ShipVia
FROM InstNwnd.dbo.Orders o;
GO
```

4 - Cargando FactClientesAtendidos al DataWarehouse



The screenshot shows a SQL Server Enterprise Manager window with three tabs: SQLQuery4.sql, SQLQuery3.sql, and SQLQuery2.sql. The active tab is SQLQuery4.sql, which contains a SQL query. The query is a multi-table insert into the FactClientesAtendidos table. The query uses a SELECT statement to retrieve data from the InstNwnd.dbo.Customers, Orders, and Employees tables. The data is grouped by CustomerID and EmployeeID, and the total number of orders and the last order date are calculated for each group. The query is executed, and the results are shown in the Messages pane at the bottom. The Messages pane indicates that 464 rows were affected and provides the completion time.

```
-- Luego hacemos la insercion de datos en la tabla FactClientesAtendidos

INSERT INTO FactClientesAtendidos (CustomerID, EmployeeID, TotalOrders, LastOrderDate)
SELECT
    c.CustomerID,
    e.EmployeeID,
    COUNT(o.OrderID) AS TotalOrders,
    MAX(o.OrderDate) AS LastOrderDate
FROM InstNwnd.dbo.Customers c
JOIN InstNwnd.dbo.Orders o ON c.CustomerID = o.CustomerID
JOIN InstNwnd.dbo.Employees e ON o.EmployeeID = e.EmployeeID
GROUP BY c.CustomerID, e.EmployeeID;
GO
```

109 %

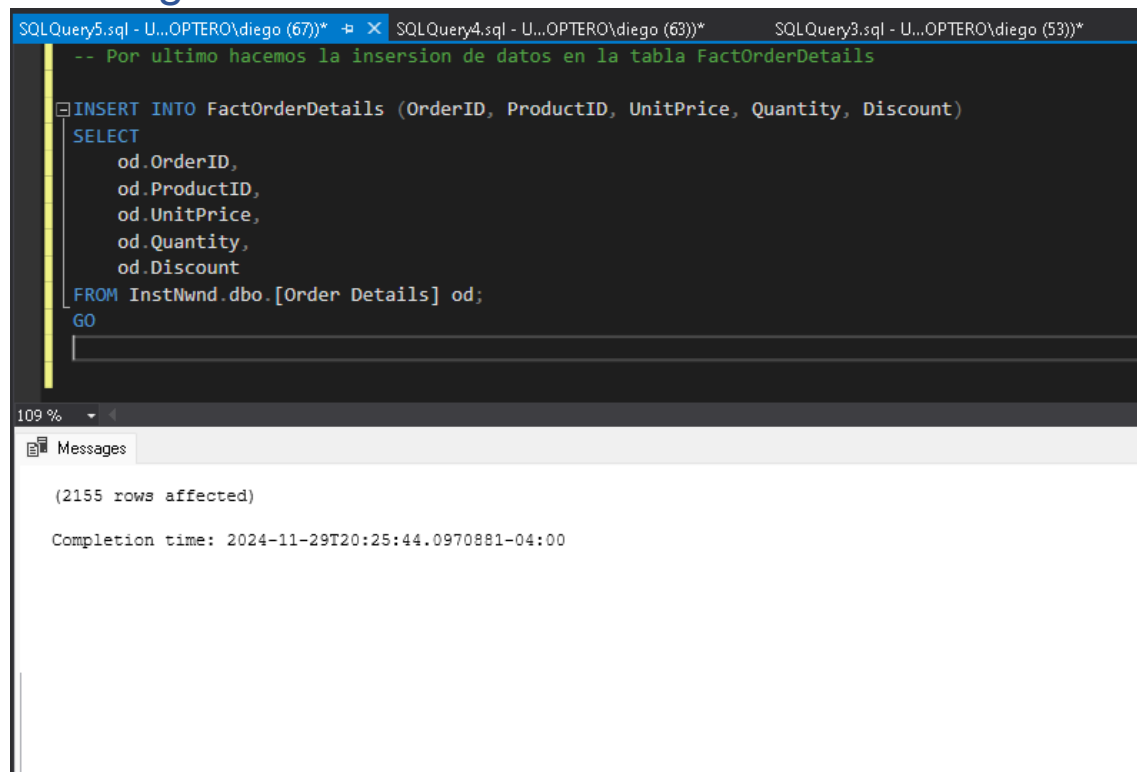
Messages

(464 rows affected)

Completion time: 2024-11-29T20:23:06.5507899-04:00

```
INSERT INTO FactClientesAtendidos (CustomerID, EmployeeID, TotalOrders,
LastOrderDate)
SELECT
    c.CustomerID,
    e.EmployeeID,
    COUNT(o.OrderID) AS TotalOrders,
    MAX(o.OrderDate) AS LastOrderDate
FROM InstNwnd.dbo.Customers c
JOIN InstNwnd.dbo.Orders o ON c.CustomerID = o.CustomerID
JOIN InstNwnd.dbo.Employees e ON o.EmployeeID = e.EmployeeID
GROUP BY c.CustomerID, e.EmployeeID;
GO
```

5 - Cargando FactOrderDetails al DataWarehouse



The screenshot shows the SQL Server Enterprise Manager interface. At the top, there are three tabs: 'SQLQuery5.sql - U...OPTERO\diego (67))*', 'SQLQuery4.sql - U...OPTERO\diego (63))*', and 'SQLQuery3.sql - U...OPTERO\diego (53))*'. The active tab is 'SQLQuery5.sql'. The main area displays a SQL query in a dark-themed editor. The query is an INSERT statement that selects data from a table named 'Order Details' in the 'InstNwnd.dbo' database and inserts it into the 'FactOrderDetails' table. The columns being inserted are OrderID, ProductID, UnitPrice, Quantity, and Discount. Below the query editor, there is a 'Messages' pane showing the execution results. It indicates that 2155 rows were affected and provides the completion time: 2024-11-29T20:25:44.0970881-04:00.

```
-- Por ultimo hacemos la insercion de datos en la tabla FactOrderDetails

INSERT INTO FactOrderDetails (OrderID, ProductID, UnitPrice, Quantity, Discount)
SELECT
    od.OrderID,
    od.ProductID,
    od.UnitPrice,
    od.Quantity,
    od.Discount
FROM InstNwnd.dbo.[Order Details] od;
GO
```

109 %

Messages

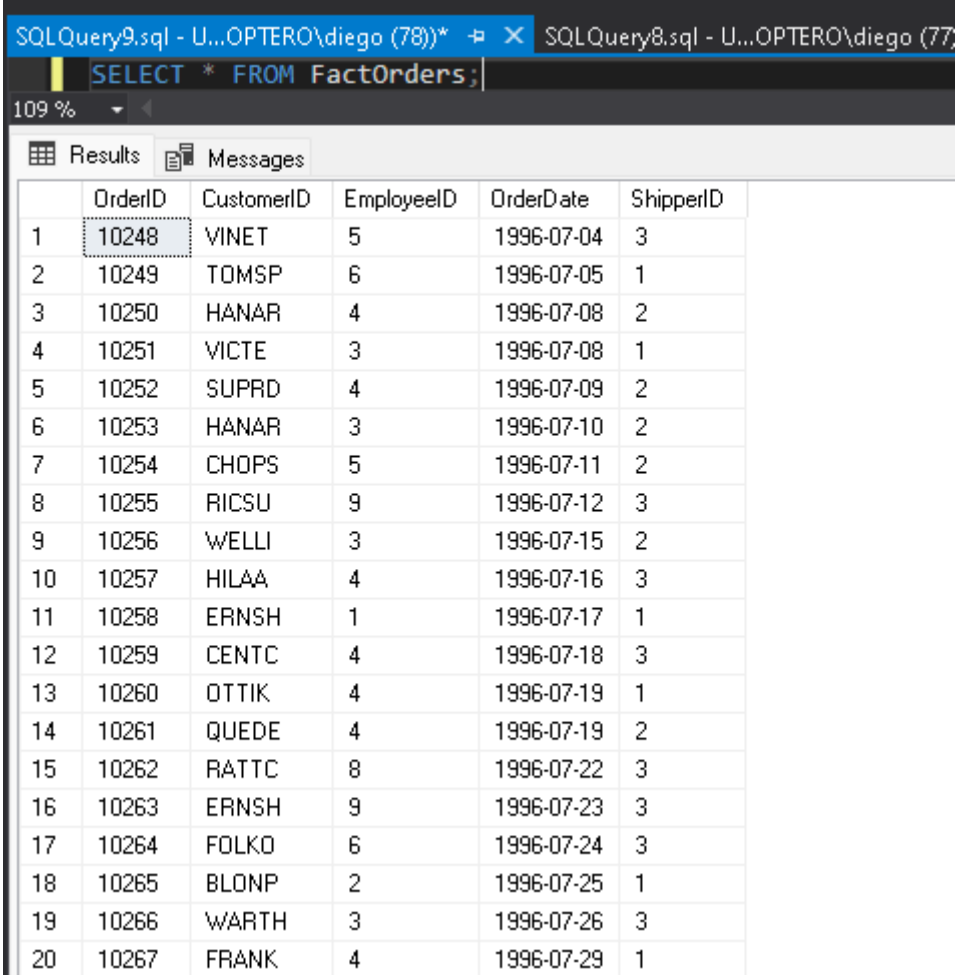
(2155 rows affected)

Completion time: 2024-11-29T20:25:44.0970881-04:00

```
INSERT INTO FactOrderDetails (OrderID, ProductID, UnitPrice, Quantity, Discount)
SELECT
    od.OrderID,
    od.ProductID,
    od.UnitPrice,
    od.Quantity,
    od.Discount
FROM InstNwnd.dbo.[Order Details] od;
GO
```

Evidencia y resultados de los datos cargados

SELECT * FROM FactOrders;



SQLQuery9.sql - U...OPTERO\diego (78)* X SQLQuery8.sql - U...OPTERO\diego (77)

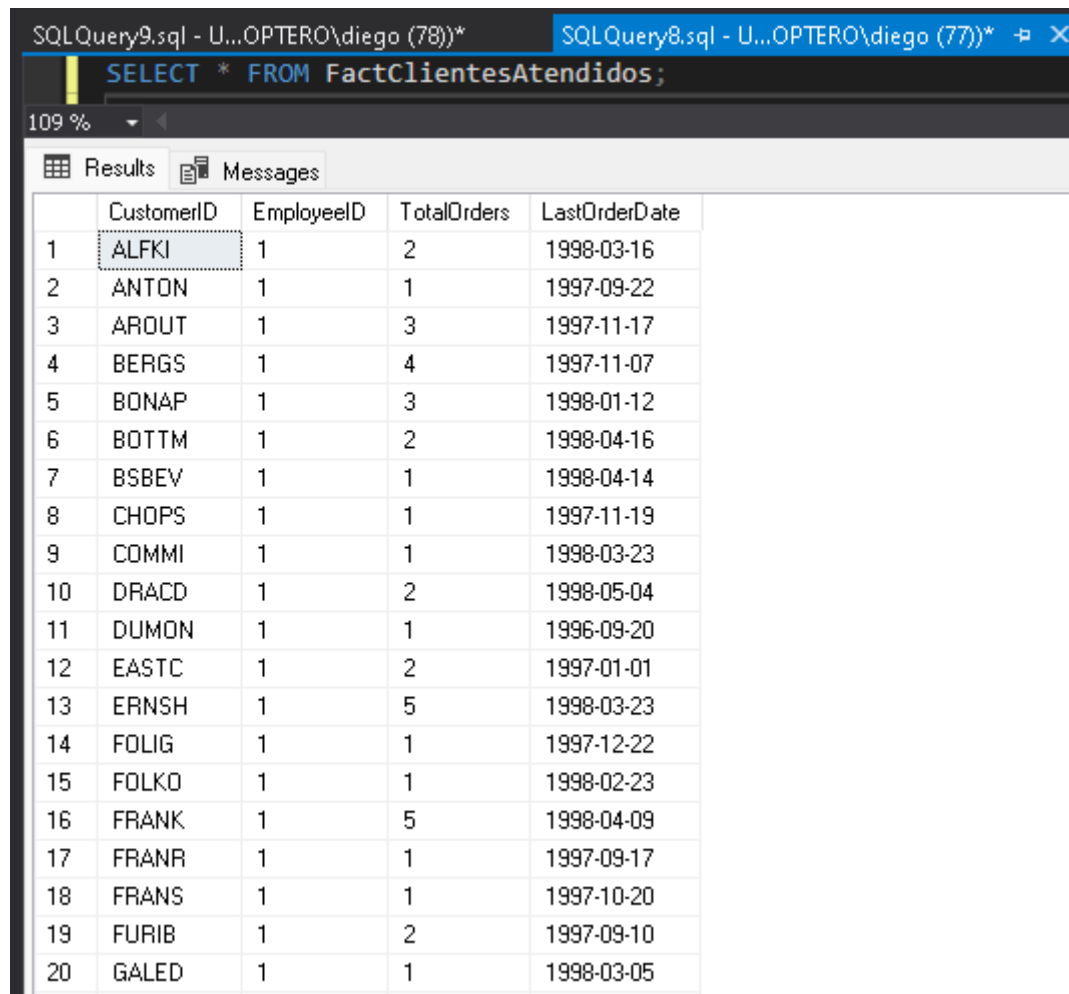
SELECT * FROM FactOrders;

109 %

Results Messages

	OrderID	CustomerID	EmployeeID	OrderDate	ShipperID
1	10248	VINET	5	1996-07-04	3
2	10249	TOMSP	6	1996-07-05	1
3	10250	HANAR	4	1996-07-08	2
4	10251	VICTE	3	1996-07-08	1
5	10252	SUPRD	4	1996-07-09	2
6	10253	HANAR	3	1996-07-10	2
7	10254	CHOPS	5	1996-07-11	2
8	10255	RICSU	9	1996-07-12	3
9	10256	WELLI	3	1996-07-15	2
10	10257	HILAA	4	1996-07-16	3
11	10258	ERNSH	1	1996-07-17	1
12	10259	CENTC	4	1996-07-18	3
13	10260	OTTIK	4	1996-07-19	1
14	10261	QUEDE	4	1996-07-19	2
15	10262	RATTC	8	1996-07-22	3
16	10263	ERNSH	9	1996-07-23	3
17	10264	FOLKO	6	1996-07-24	3
18	10265	BLONP	2	1996-07-25	1
19	10266	WARTH	3	1996-07-26	3
20	10267	FRANK	4	1996-07-29	1

SELECT * FROM FactClientesAtendidos;



The screenshot shows a SQL Server Enterprise Manager window with two tabs: 'SQLQuery9.sql - U...OPTERO\diego (78))*' and 'SQLQuery8.sql - U...OPTERO\diego (77))*'. The active tab displays the query 'SELECT * FROM FactClientesAtendidos;'. Below the query editor, the 'Results' tab is selected, showing a table with 5 columns: 'CustomerID', 'EmployeeID', 'TotalOrders', and 'LastOrderDate'. The table contains 20 rows of data, with the first row highlighted. The zoom level is set to 109%.

	CustomerID	EmployeeID	TotalOrders	LastOrderDate
1	ALFKI	1	2	1998-03-16
2	ANTON	1	1	1997-09-22
3	AROUT	1	3	1997-11-17
4	BERGS	1	4	1997-11-07
5	BONAP	1	3	1998-01-12
6	BOTTM	1	2	1998-04-16
7	BSBEV	1	1	1998-04-14
8	CHOPS	1	1	1997-11-19
9	COMMI	1	1	1998-03-23
10	DRACD	1	2	1998-05-04
11	DUMON	1	1	1996-09-20
12	EASTC	1	2	1997-01-01
13	ERNSH	1	5	1998-03-23
14	FOLIG	1	1	1997-12-22
15	FOLKO	1	1	1998-02-23
16	FRANK	1	5	1998-04-09
17	FRANR	1	1	1997-09-17
18	FRANS	1	1	1997-10-20
19	FURIB	1	2	1997-09-10
20	GALED	1	1	1998-03-05

SELECT * FROM FactOrderDetails;

SQLQuery7.sql - U...OPTERO\diego (58))* -> X SQLQuery5.sql - U...OPTERO\diego (67))*

SELECT * FROM FactOrderDetails;

109 %

Results Messages

	OrderID	ProductID	UnitPrice	Quantity	Discount
1	10248	11	14.00	12	0
2	10248	42	9.80	10	0
3	10248	72	34.80	5	0
4	10249	14	18.60	9	0
5	10249	51	42.40	40	0
6	10250	41	7.70	10	0
7	10250	51	42.40	35	0.150000005960464
8	10250	65	16.80	15	0.150000005960464
9	10251	22	16.80	6	0.0500000007450581
10	10251	57	15.60	15	0.0500000007450581
11	10251	65	16.80	20	0
12	10252	20	64.80	40	0.0500000007450581
13	10252	33	2.00	25	0.0500000007450581
14	10252	60	27.20	40	0
15	10253	31	10.00	20	0
16	10253	39	14.40	42	0
17	10253	49	16.00	40	0
18	10254	24	3.60	15	0.150000005960464
19	10254	55	19.20	21	0.150000005960464
20	10254	74	8.00	21	0