

SQLQuery1.sql - D:\SLCV1V\mhbk8 (52)*

```
USE Sales_db;
GO
CREATE SCHEMA Sales_schema;
GO

CREATE TABLE Sales_db.Sales_schema.client(
  client_id int primary key,
  city varchar(15) not null,
  region varchar(15) not null,
  country varchar(15) not null
);

CREATE TABLE Sales_db.Sales_schema.product(
  product_id int primary key,
  name varchar(15) not null,
  category varchar(15) not null,
  services_price numeric(7,2) not null,
  sales_price numeric(7,2) not null,
  supplier varchar(15) not null
);

CREATE TABLE Sales_db.Sales_schema.date(
  date_id int primary key,
  month int not null,
  monthName varchar(15) not null,
  quarter int not null,
  year int not null,
);

CREATE TABLE Sales_db.Sales_schema.sales(
  date_id int references Sales_schema.date (date_id) ,
  product_id int references Sales_schema.product (product_id) ,
  client_id int references Sales_schema.client (client_id) ,
  delivery_date date ,
  quantity int ,
  amount int ,
);
```

100 %

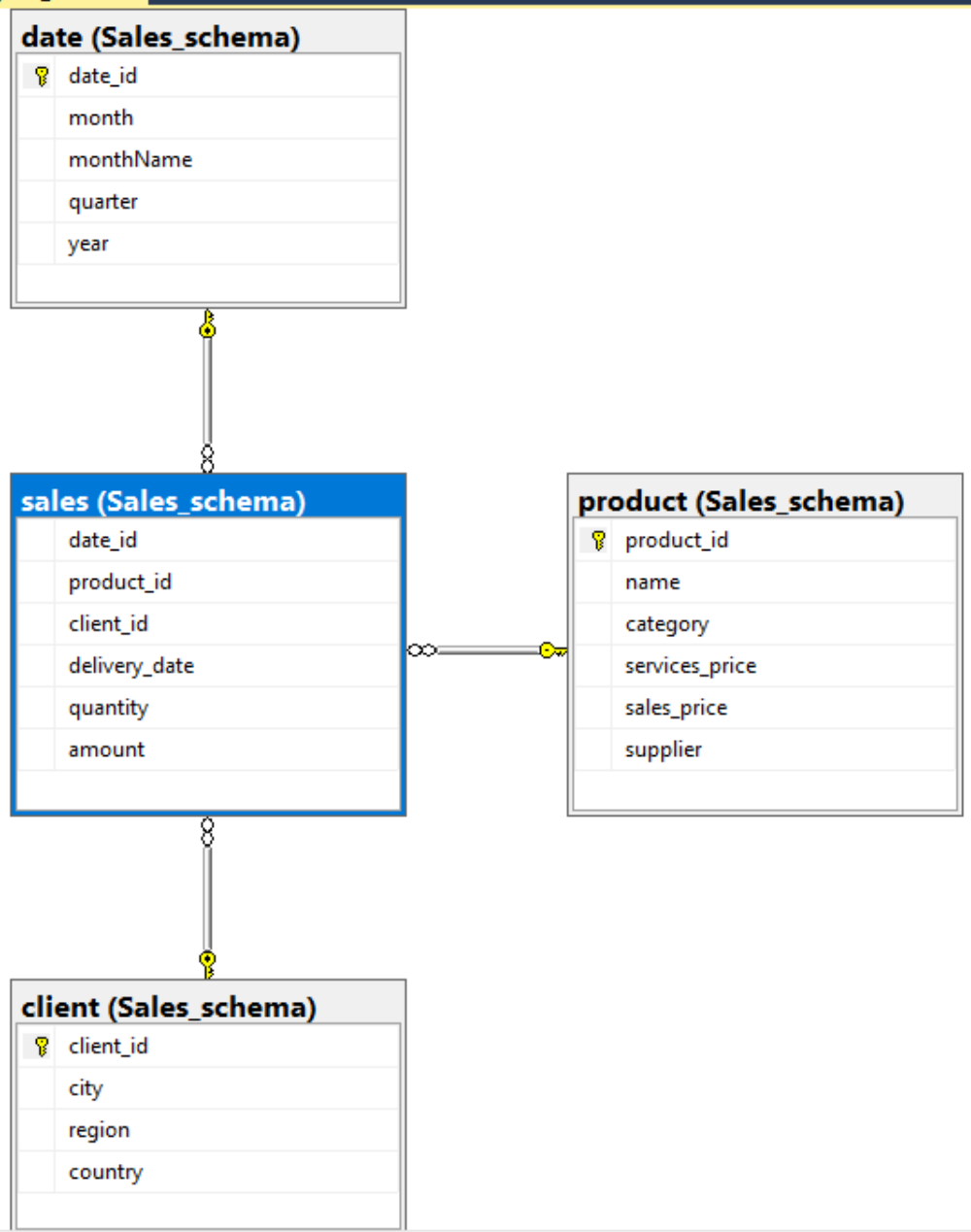
Messages

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Query executed successfully.

DESKTOP-2SLCV1V (16.0 RTM) | DESKTOP-2SLCV1V\mhbk8 ... | Sales_db | 00:00:00 | 0 rows

DESKTOP-2SLCV1V.Sales_db - Diagram_0*



1. State which fact tables and dimension tables are in the star schema for this warehouse

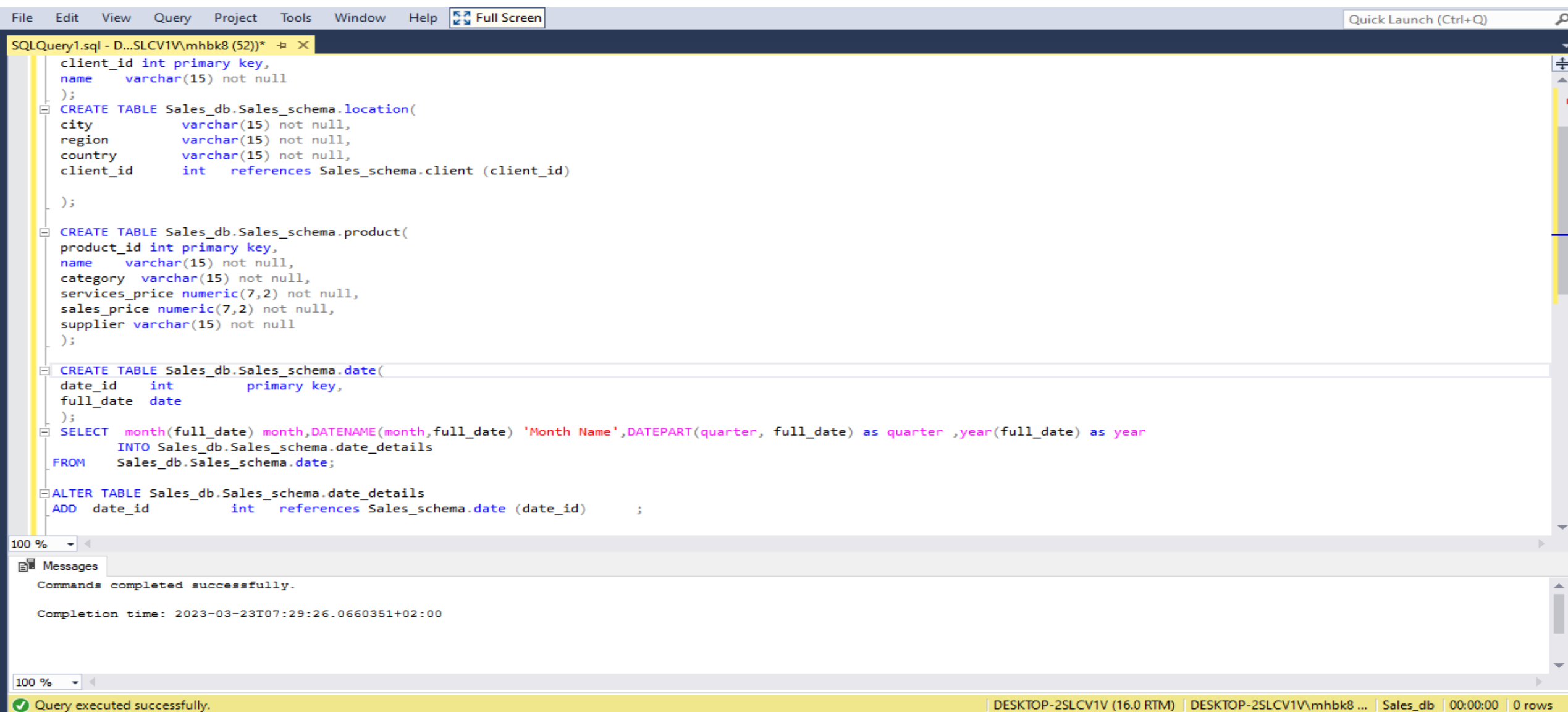
Fact tables : sales

Dimension tables : [date, product, client]

2. What are the measurements?

Quantity, amount, sales price, services price

3. We want to transform this schema into a snowflake schema. Give the new representation of the DATE and CLIENT tables.

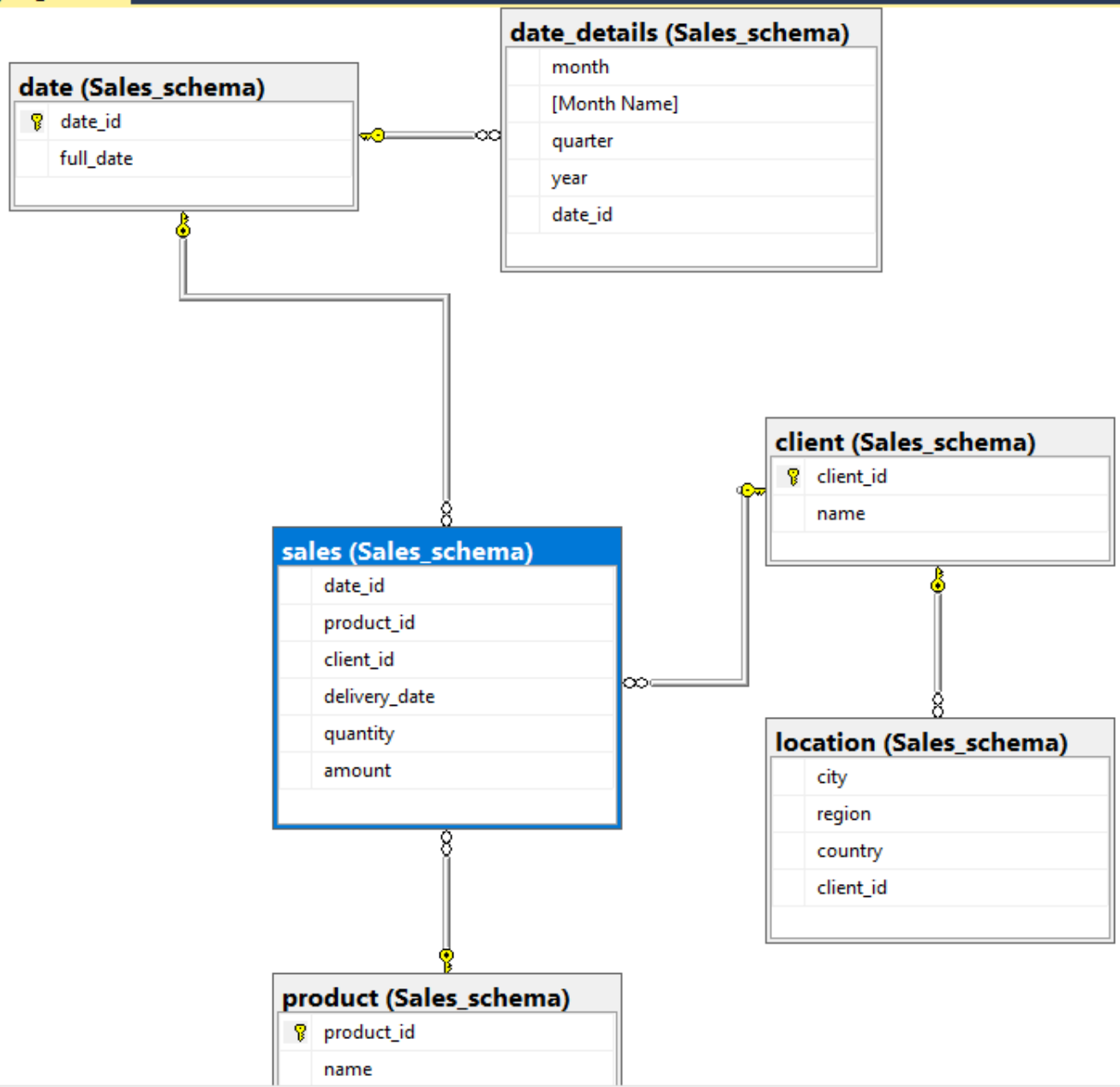


The screenshot shows a SQL Server Enterprise Manager interface. The top menu bar includes File, Edit, View, Query, Project, Tools, Window, Help, and a Full Screen button. The title bar indicates the file is 'SQLQuery1.sql - D:\SLCV1V\mhbk8 (52)*'. The main query window contains the following SQL code:

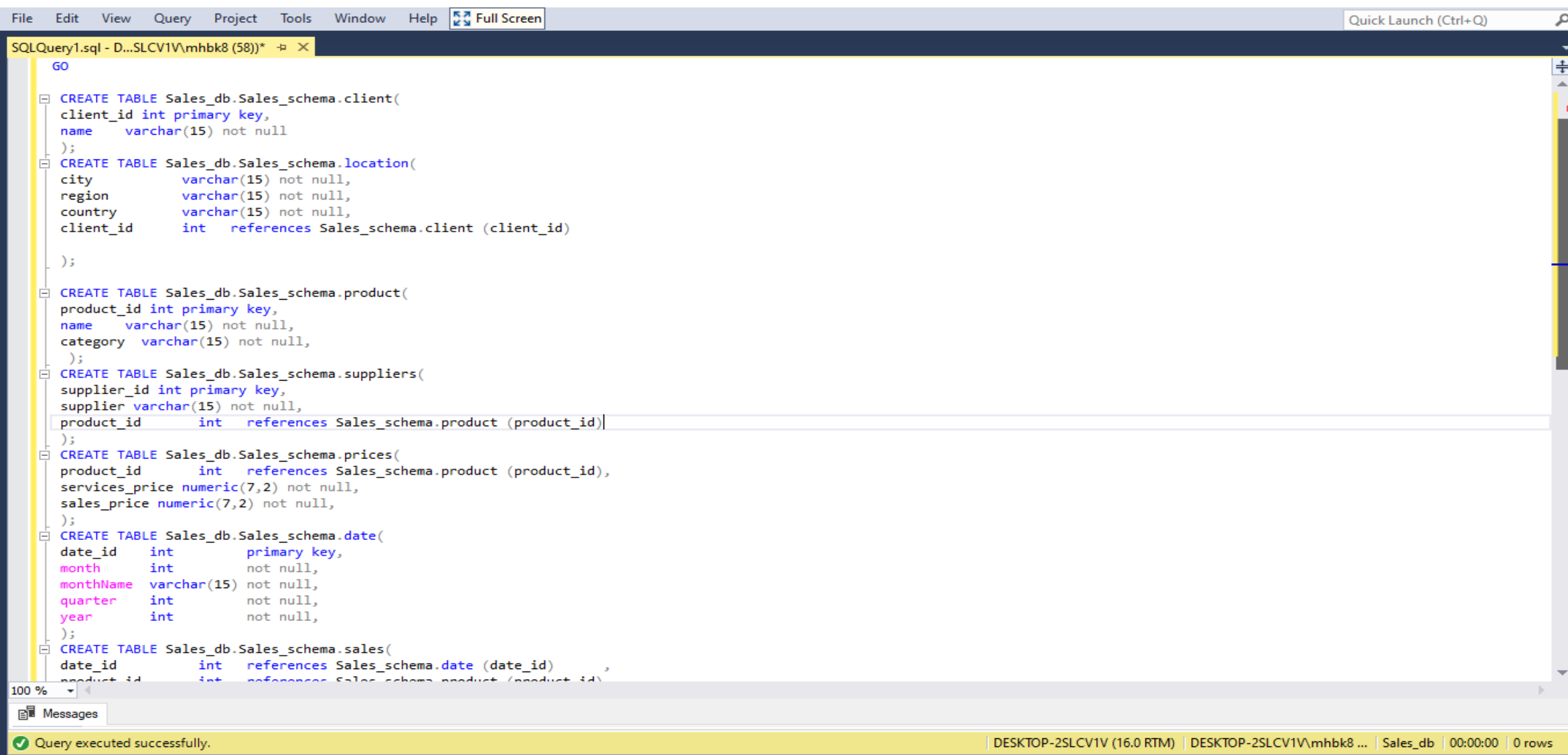
```
client_id int primary key,  
name      varchar(15) not null  
);  
  
CREATE TABLE Sales_db.Sales_schema.location(  
city      varchar(15) not null,  
region    varchar(15) not null,  
country   varchar(15) not null,  
client_id int references Sales_schema.client (client_id)  
);  
  
CREATE TABLE Sales_db.Sales_schema.product(  
product_id int primary key,  
name        varchar(15) not null,  
category    varchar(15) not null,  
services_price numeric(7,2) not null,  
sales_price numeric(7,2) not null,  
supplier    varchar(15) not null  
);  
  
CREATE TABLE Sales_db.Sales_schema.date(  
date_id    int primary key,  
full_date  date  
);  
  
SELECT month(full_date) month, DATENAME(month, full_date) 'Month Name', DATEPART(quarter, full_date) as quarter, year(full_date) as year  
INTO Sales_db.Sales_schema.date_details  
FROM Sales_db.Sales_schema.date;  
  
ALTER TABLE Sales_db.Sales_schema.date_details  
ADD date_id int references Sales_schema.date (date_id) ;
```

The bottom status bar shows '100 %' zoom, 'Messages' tab, 'Commands completed successfully.', 'Completion time: 2023-03-23T07:29:26.0660351+02:00', and a yellow bar at the very bottom stating 'Query executed successfully.' The bottom-most status bar shows 'Ready', 'Ln 28', 'Col 42', 'Ch 42', 'INS', and 'DESKTOP-2SLCV1V (16.0 RTM) | DESKTOP-2SLCV1V\mhbk8 ... | Sales_db | 00:00:00 | 0 rows'.

4. Design the corresponding snowflake schema.



Another representation of the product and CLIENT tables.



```
SQLQuery1.sql - D:\SLCV1V\mhbk8 (58))* X
GO

CREATE TABLE Sales_db.Sales_schema.client(
  client_id int primary key,
  name varchar(15) not null
);

CREATE TABLE Sales_db.Sales_schema.location(
  city varchar(15) not null,
  region varchar(15) not null,
  country varchar(15) not null,
  client_id int references Sales_schema.client (client_id)
);

CREATE TABLE Sales_db.Sales_schema.product(
  product_id int primary key,
  name varchar(15) not null,
  category varchar(15) not null,
);

CREATE TABLE Sales_db.Sales_schema.suppliers(
  supplier_id int primary key,
  supplier varchar(15) not null,
  product_id int references Sales_schema.product (product_id)
);

CREATE TABLE Sales_db.Sales_schema.prices(
  product_id int references Sales_schema.product (product_id),
  services_price numeric(7,2) not null,
  sales_price numeric(7,2) not null,
);

CREATE TABLE Sales_db.Sales_schema.date(
  date_id int primary key,
  month int not null,
  monthName varchar(15) not null,
  quarter int not null,
  year int not null,
);

CREATE TABLE Sales_db.Sales_schema.sales(
  date_id int references Sales_schema.date (date_id),
  product_id int references Sales_schema.product (product_id),
  sales_price numeric(7,2) not null,
  services_price numeric(7,2) not null,
);
```

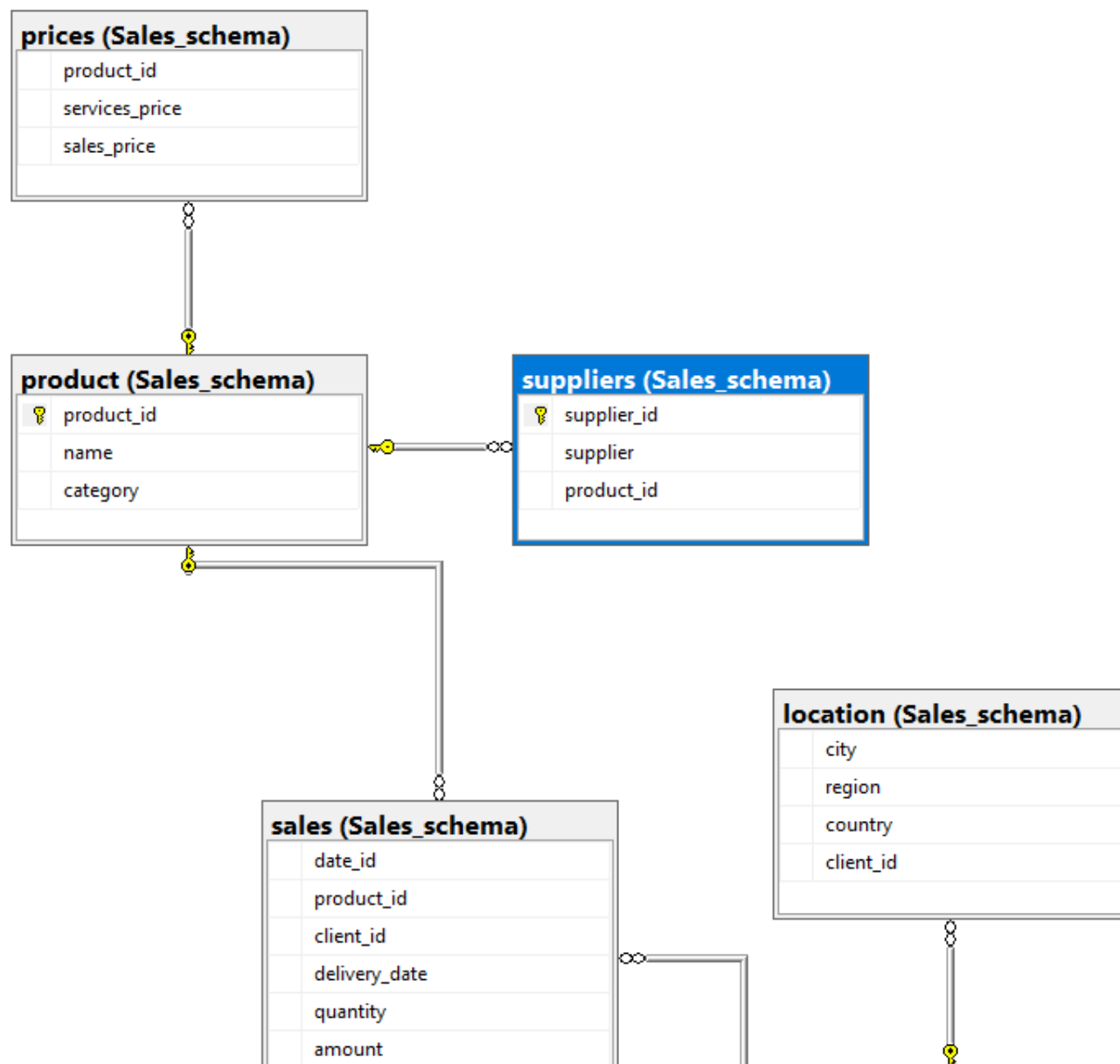
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Messages

Query executed successfully.

DESKTOP-2SLCV1V (16.0 RTM) | DESKTOP-2SLCV1V\mhbk8 ... | Sales_db | 00:00:00 | 0 rows

DESKTOP-2SLCV1V.Sales_db - Diagram_0*



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Messages

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DESKTOP-2SLCV1V.Sales_db - Diagram_0*

name
category

supplier
product_id

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date_id	
product_id	
client_id	
delivery_date	
quantity	
amount	

location (Sales_schema)	
city	
region	
country	
client_id	

client (Sales_schema)	
client_id	
name	

date (Sales_schema)	
date_id	
month	
monthName	
quarter	
year	

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