

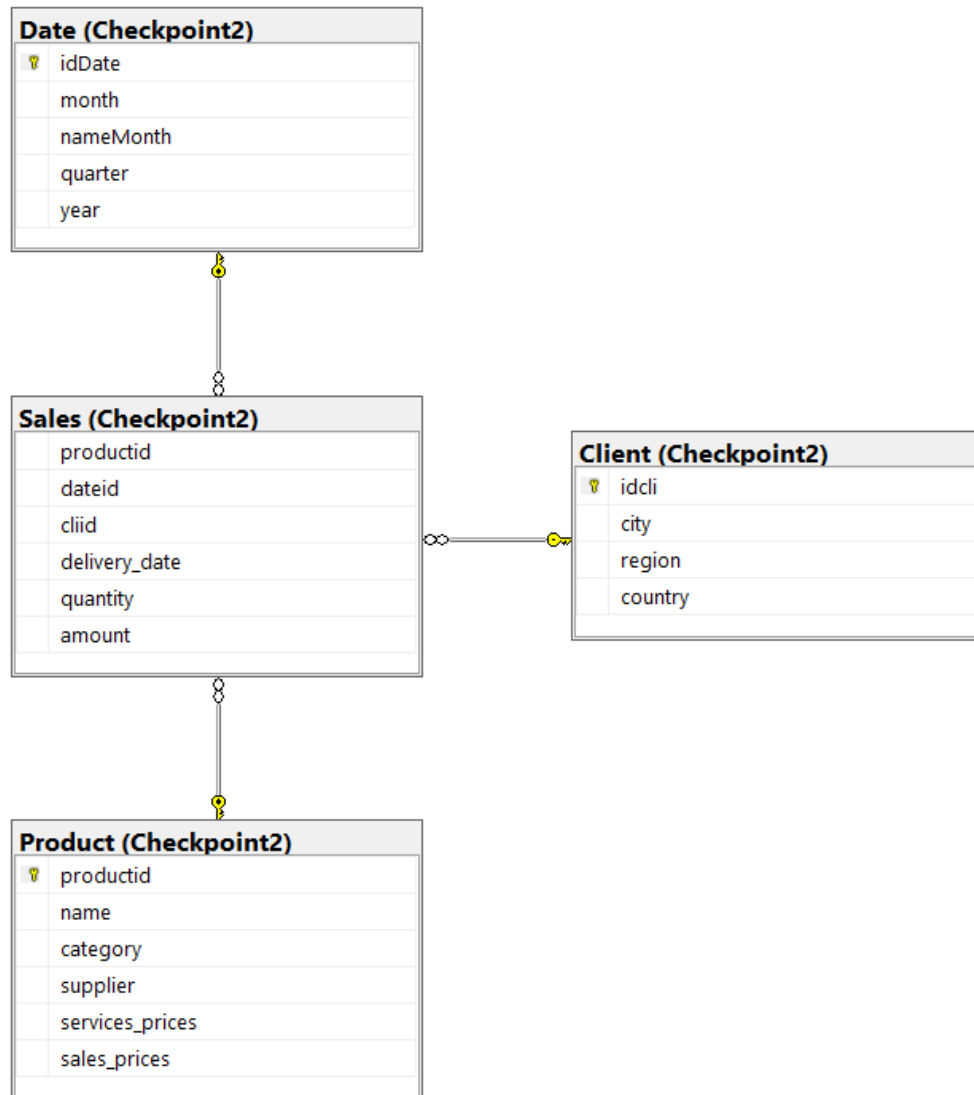
Checkpoint (2):

```
--Create database checkpoints ;
--CLIENT (idcli, city, region, country)
--CREATE SCHEMA Checkpoint2 ;
CREATE TABLE Checkpoint2.Client (
    idcli INT IDENTITY (1, 1) PRIMARY KEY
    , city VARCHAR (255)
    , region VARCHAR (255)
    , country VARCHAR (255)
);

--PRODUCT (productid, name, category, services_price, sales_price, supplier)
CREATE TABLE Checkpoint2.Product (
    productid INT IDENTITY (1, 1) PRIMARY KEY
    , name VARCHAR (255)
    , category VARCHAR (255)
    , supplier VARCHAR (255)
    , services_prices Int
    , sales_prices int
);

--DATE (idDate, month, nameMonth, quarter, year)
CREATE TABLE Checkpoint2.Date (
    idDate INT IDENTITY (1, 1) PRIMARY KEY
    , month VARCHAR (2)
    , nameMonth VARCHAR (25)
    , quarter VARCHAR (25)
    , year varchar (4)
);

--SALES (productid, dateid, cliid, delivery_date, quantity, amount)
CREATE TABLE Checkpoint2.Sales (
    productid INT
    , dateid Int
    , cliid Int Identity (1,1)
    , delivery_date DATE
    , quantity Int
    , amount int ,
FOREIGN KEY (cliid)
    REFERENCES Checkpoint2.Client (idcli) ,
FOREIGN KEY (dateid)
    REFERENCES Checkpoint2.Date (idDate) ,
Foreign Key (productid)
    References checkpoint2.product (productid)
);
```



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

The fact table is *sales table* while the dimension tables are the *date*, *client*, and *product* tables

2. What are the measurements?

The measurements are *quantity*, *amount*, *sales* and *services prices*.

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

```
Create table checkpoint2.fulldate (
    date_id INT identity (1,1) Primary key
    , full_date date
);
Select MONTH (full_date) as month
, datename (month, full_date) as nameMonth
, DATEPART (quarter, full_date) as quarter
, year (full_date) as year
    into checkpoint2.Date_details
from checkpoint2.fulldate

alter table checkpoint2.Date_details
add date_id int
    references checkpoint2.fulldate (date_id)

alter table checkpoint2.Sales
add date_id int
alter table checkpoint2.Sales
add foreign key (date_id)
    references checkpoint2.fulldate (date_id)

drop table dbo.client_name
create table checkpoint2.client_name (
    client_id int identity (1,1) primary key
    , client_name varchar (255)
);

drop table checkpoint2.client_location
create table checkpoint2.client_location (
    city VARCHAR (255)
    , region VARCHAR (255)
    , country VARCHAR (255)
    , client_id int
        references checkpoint2.client_name (client_id)
);

alter table checkpoint2.Sales
add foreign key (cliid)
    references checkpoint2.client_name (client_id)
```

4. Design the corresponding snowflake schema.

