

На основе базы данных AdventureWorks постройте свою базу данных с таблицей фактов и таблицами измерений, по схеме "Звезда".

Я взял таблицы:

Product, SalesOrderDetail, SalesOrderHeader

Звезда состояла из:

FctSales, DmnDate, DmnOrder, DmnProduct

## Создание таблиц

### Таблица фактов

FctSales

```
INSERT INTO [dbo].[FctSales]
    ([ProductID]
    ,[SalesOrderID]
    ,[OrderDate]
    ,[OrderQty]
    ,[UnitPrice]
    ,[ModifiedDate])
SELECT d.[ProductID]
    ,d.[SalesOrderID]
    ,h.[OrderDate]
    ,d.[OrderQty]
    ,d.[UnitPrice]
    ,d.[ModifiedDate]
FROM [Sales].[SalesOrderDetail] d
INNER JOIN [Sales].[SalesOrderHeader] h on d.SalesOrderDetailID = h.SalesOrderID
```

```
USE [AdventureWorks2019]
GO

INSERT INTO [dbo].[FctSales]
    ([ProductID]
    ,[SalesOrderID]
    ,[OrderDate]
    ,[OrderQty]
    ,[UnitPrice]
    ,[ModifiedDate])
SELECT d.[ProductID]
    ,d.[SalesOrderID]
    ,h.[OrderDate]
    ,d.[OrderQty]
    ,d.[UnitPrice]
    ,d.[ModifiedDate]
FROM [Sales].[SalesOrderDetail] d
INNER JOIN [Sales].[SalesOrderHeader] h on d.SalesOrderDetailID = h.SalesOrderID
GO
```

### Запрос select

```
select f.ProductID, f.SalesOrderID, f.OrderDate, sum(f.OrderQty * f.UnitPrice) as Sum
from [dbo].DmnProduct p, [dbo].DmnOrder h, [dbo].DmnDate d, [dbo].FctSales f
where
    f.ProductID = p.ProductID and
    f.SalesOrderID = h.SalesOrderID and
    f.OrderDate = d.OrderDate
group by
    f.ProductID, f.SalesOrderID, f.OrderDate
```

### Таблица измерений

DmnDate

```
INSERT INTO [dbo].[DmnDate]
    ([OrderDate]
    ,[DueDate]
    ,[ShipDate]
    ,[Status]
    ,[SalesOrderNumber]
    ,[TerritoryID]
    ,[ModifiedDate])
SELECT d.[OrderDate],
    d.[DueDate],
    d.[ShipDate],
    d.[Status],
    d.[SalesOrderNumber],
    d.[TerritoryID],
    d.[ModifiedDate]
FROM [Sales].SalesOrderHeader d
```

```

USE [AdventureWorks2019]
GO

INSERT INTO [dbo].[DmnDate]
(
    [OrderDate]
    , [DueDate]
    , [ShipDate]
    , [Status]
    , [SalesOrderNumber]
    , [TerritoryID]
    , [ModifiedDate]
)
SELECT d.[OrderDate],
       d.[DueDate],
       d.[ShipDate],
       d.[Status],
       d.[SalesOrderNumber],
       d.[TerritoryID],
       d.[ModifiedDate]
FROM [Sales].SalesOrderHeader d
GO

```

```

SELECT TOP (1000) [OrderDate]
, [DueDate]
, [ShipDate]
, [Status]
, [SalesOrderNumber]
, [TerritoryID]
, [ModifiedDate]
FROM [AdventureWorks2019].[dbo].[DmnDate]

```

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Results		Messages					
	OrderDate	DueDate	ShipDate	Status	SalesOrderNumber	TerritoryID	ModifiedDate
1	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43659	5	2011-06-07 00:00:00.000
2	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43660	5	2011-06-07 00:00:00.000
3	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43661	6	2011-06-07 00:00:00.000
4	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43662	6	2011-06-07 00:00:00.000
5	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43663	4	2011-06-07 00:00:00.000
6	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43664	1	2011-06-07 00:00:00.000
7	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43665	1	2011-06-07 00:00:00.000
8	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43666	4	2011-06-07 00:00:00.000
9	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43667	3	2011-06-07 00:00:00.000
10	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43668	6	2011-06-07 00:00:00.000
11	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43669	1	2011-06-07 00:00:00.000
12	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43670	3	2011-06-07 00:00:00.000
13	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43671	1	2011-06-07 00:00:00.000
14	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43672	6	2011-06-07 00:00:00.000
15	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43673	2	2011-06-07 00:00:00.000
16	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43674	6	2011-06-07 00:00:00.000
17	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43675	3	2011-06-07 00:00:00.000
18	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43676	5	2011-06-07 00:00:00.000
19	2011-05-31 00:00:00.000	2011-06-12 00:00:00.000	2011-06-07 00:00:00.000	5	SO43677	6	2011-06-07 00:00:00.000

DmnOrder

```
INSERT INTO [dbo].[DmnOrder]
    ([SalesOrderID]
    ,[SalesOrderNumber]
    ,[AccountNumber]
    ,[CreditCardID]
    ,[OrderDate]
    ,[ModifiedDate])
SELECT d.[SalesOrderID],
    d.[SalesOrderNumber],
    d.[AccountNumber],
    d.[CreditCardID],
    d.[OrderDate],
    d.[ModifiedDate]
FROM [Sales].SalesOrderHeader d
```

```
USE [AdventureWorks2019]
GO

INSERT INTO [dbo].[DmnOrder]
    ([SalesOrderID]
    ,[SalesOrderNumber]
    ,[AccountNumber]
    ,[CreditCardID]
    ,[OrderDate]
    ,[ModifiedDate])
SELECT d.[SalesOrderID],
    d.[SalesOrderNumber],
    d.[AccountNumber],
    d.[CreditCardID],
    d.[OrderDate],
    d.[ModifiedDate]
FROM [Sales].SalesOrderHeader d
GO
```

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

```

SELECT TOP (1000) [SalesOrderID]
, [SalesOrderNumber]
, [AccountNumber]
, [CreditCardID]
, [OrderDate]
, [ModifiedDate]
FROM [AdventureWorks2019].[dbo].[DmnOrder]

```

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Results Messages

	SalesOrderID	SalesOrderNumber	AccountNumber	CreditCardID	OrderDate	ModifiedDate
1	43659	SO43659	10-4020-000676	16281	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
2	43660	SO43660	10-4020-000117	5618	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
3	43661	SO43661	10-4020-000442	1346	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
4	43662	SO43662	10-4020-000227	10456	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
5	43663	SO43663	10-4020-000510	4322	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
6	43664	SO43664	10-4020-000397	806	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
7	43665	SO43665	10-4020-000146	15232	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
8	43666	SO43666	10-4020-000511	13349	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
9	43667	SO43667	10-4020-000646	10370	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
10	43668	SO43668	10-4020-000514	1566	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
11	43669	SO43669	10-4020-000578	15538	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
12	43670	SO43670	10-4020-000504	18017	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
13	43671	SO43671	10-4020-000200	13693	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
14	43672	SO43672	10-4020-000119	3980	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
15	43673	SO43673	10-4020-000618	1417	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
16	43674	SO43674	10-4020-000083	19204	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
17	43675	SO43675	10-4020-000670	11886	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
18	43676	SO43676	10-4020-000017	18153	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000
19	43677	SO43677	10-4020-000679	14030	2011-05-31 00:00:00.000	2011-06-07 00:00:00.000

DmnProduct

```

INSERT INTO [dbo].[DmnProduct]
([ProductID]
,[CarrierTrackingNumber]
,[SpecialOfferID]
,[UnitPriceDiscount]
,[LineTotal]
,[ModifiedDate])
SELECT d.[ProductID],
d.[CarrierTrackingNumber],
d.[SpecialOfferID],
d.[UnitPriceDiscount],
d.[LineTotal],
d.[ModifiedDate]
FROM [Sales].SalesOrderDetail d

```

```
USE [AdventureWorks2019]
```

```
GO
```

```
INSERT INTO [dbo].[DimProduct]
(
    [ProductID]
    , [CarrierTrackingNumber]
    , [SpecialOfferID]
    , [UnitPriceDiscount]
    , [LineTotal]
    , [ModifiedDate]
)
SELECT d.[ProductID],
       d.[CarrierTrackingNumber],
       d.[SpecialOfferID],
       d.[UnitPriceDiscount],
       d.[LineTotal],
       d.[ModifiedDate]
FROM [Sales].SalesOrderDetail d
GO
```

```

SELECT TOP (1000) [ProductID]
, [CarrierTrackingNumber]
, [SpecialOfferID]
, [UnitPriceDiscount]
, [LineTotal]
, [ModifiedDate]
FROM [AdventureWorks2019].[dbo].[DimProduct]

```

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Results Messages

	ProductID	CarrierTrackingNumber	SpecialOfferID	UnitPriceDiscount	Line Total	ModifiedDate
1	776	4911-403C-98	1	0,00	2025	2011-05-31 00:00:00.000
2	777	4911-403C-98	1	0,00	6075	2011-05-31 00:00:00.000
3	778	4911-403C-98	1	0,00	2025	2011-05-31 00:00:00.000
4	771	4911-403C-98	1	0,00	2040	2011-05-31 00:00:00.000
5	772	4911-403C-98	1	0,00	2040	2011-05-31 00:00:00.000
6	773	4911-403C-98	1	0,00	4080	2011-05-31 00:00:00.000
7	774	4911-403C-98	1	0,00	2040	2011-05-31 00:00:00.000
8	714	4911-403C-98	1	0,00	87	2011-05-31 00:00:00.000
9	716	4911-403C-98	1	0,00	29	2011-05-31 00:00:00.000
10	709	4911-403C-98	1	0,00	34	2011-05-31 00:00:00.000
11	712	4911-403C-98	1	0,00	10	2011-05-31 00:00:00.000
12	711	4911-403C-98	1	0,00	81	2011-05-31 00:00:00.000
13	762	6431-4D57-83	1	0,00	419	2011-05-31 00:00:00.000
14	758	6431-4D57-83	1	0,00	875	2011-05-31 00:00:00.000
15	745	4E0A-4F89-AE	1	0,00	810	2011-05-31 00:00:00.000
16	743	4E0A-4F89-AE	1	0,00	715	2011-05-31 00:00:00.000
17	747	4E0A-4F89-AE	1	0,00	1429	2011-05-31 00:00:00.000
18	712	4E0A-4F89-AE	1	0,00	21	2011-05-31 00:00:00.000
19	715	4E0A-4F89-AE	1	0,00	115	2011-05-31 00:00:00.000