

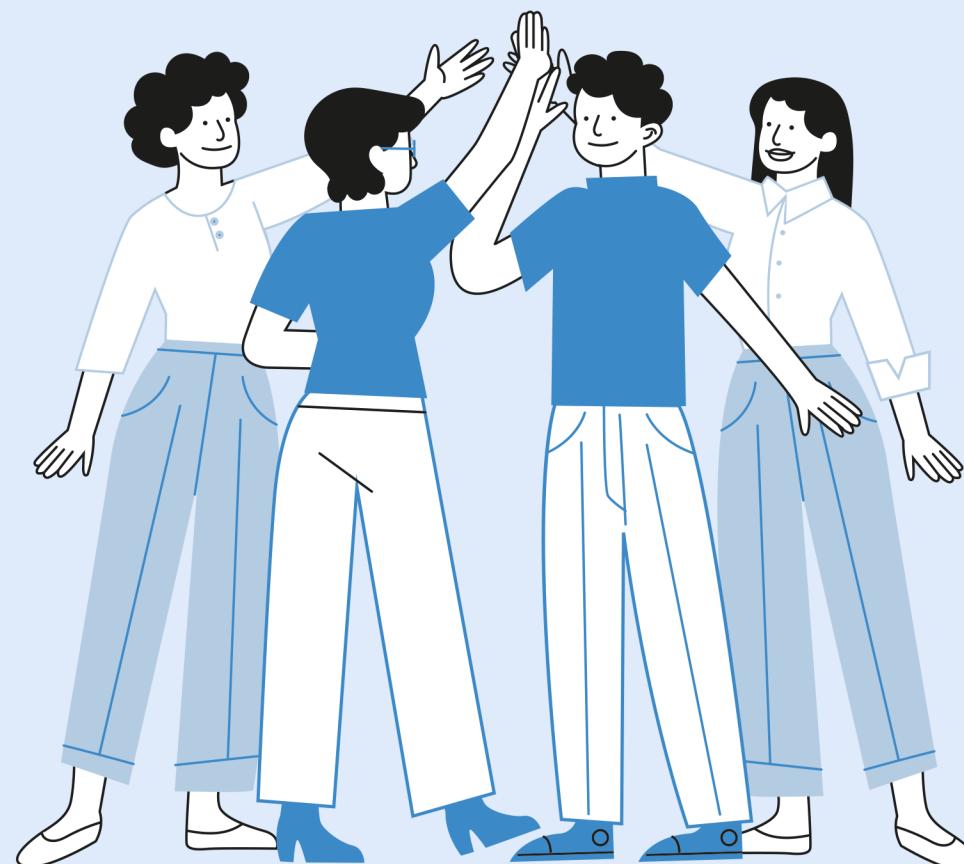


Pharma Distribution





Team



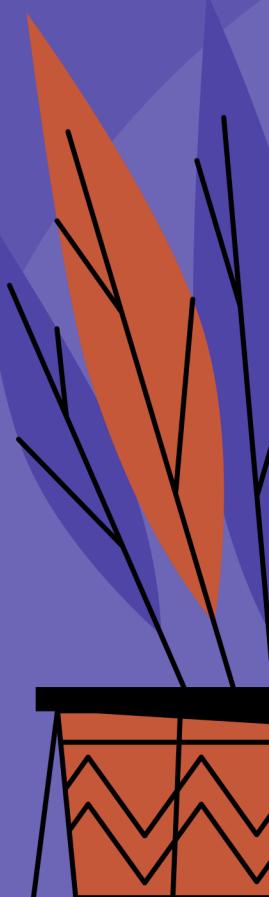
- 1 Mostafa Yaseen**
- 2 Mohammed Khalaf**
- 3 Ahmed Mohammed**
- 4 Mohammed Sabry**
- 5 Rahma Mahmoud**



Data Wranglers

AHMED MOHAMMED
MOHAMMED SABRY
MOHAMED MOHAMED MAGEM
ABD-EL MAGEM MOHAMED
MOHAMMED ABD-EL GALY
MOHAMMED FARAG
AHMED MOHAMMED FARGALY

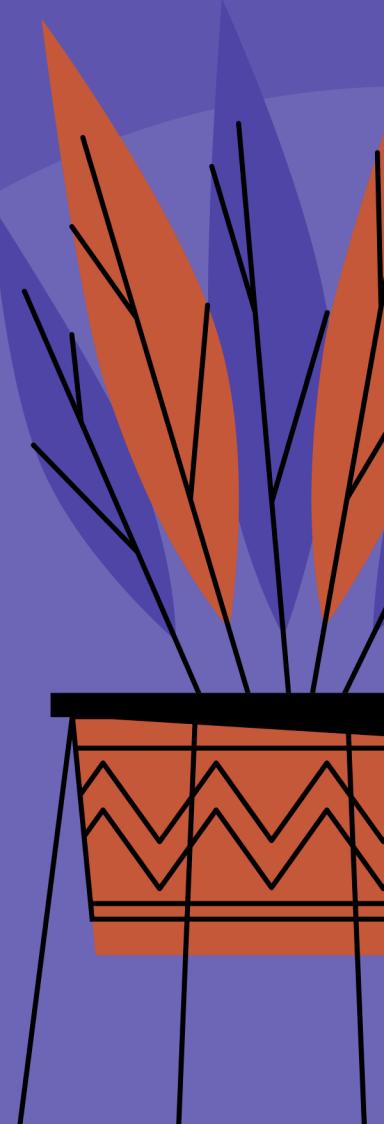
MOSTAFA YASSEN
IBRAHIM KHALAF HASBAM
MOHAMMED OMAR
HESSHAM RAHMA
MOHAMMED ABDEL EL GADOL
MAHMOUD RAHMA
MOHAMMED HASSAM
MOHAMMED RAHMA
MOHAMMED RAHMA
MOHAMMED RAHMA





About the project

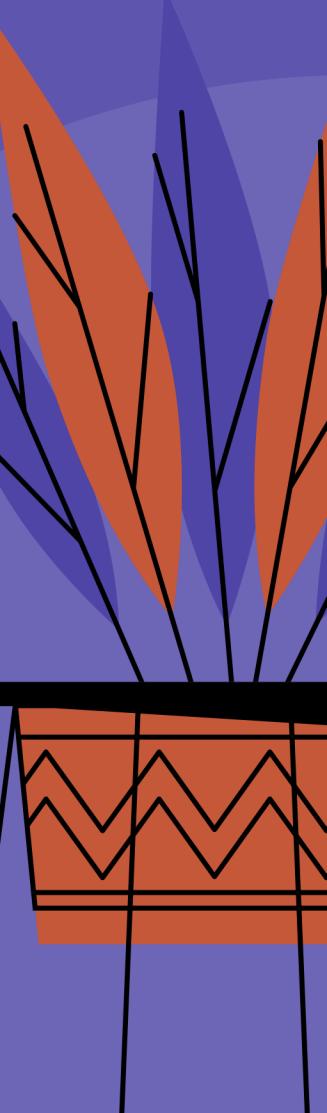
Analyze distribution transactions
to optimize supply chain
operations and improve product
availability in the
pharmaceutical industry.





Business Requirements

Analyze the sales transactions
in pharma company





Tools & Technologies



- Microsoft SQL Server

- Python

- Visual Studio

- SSIS & SSAS & SSRS

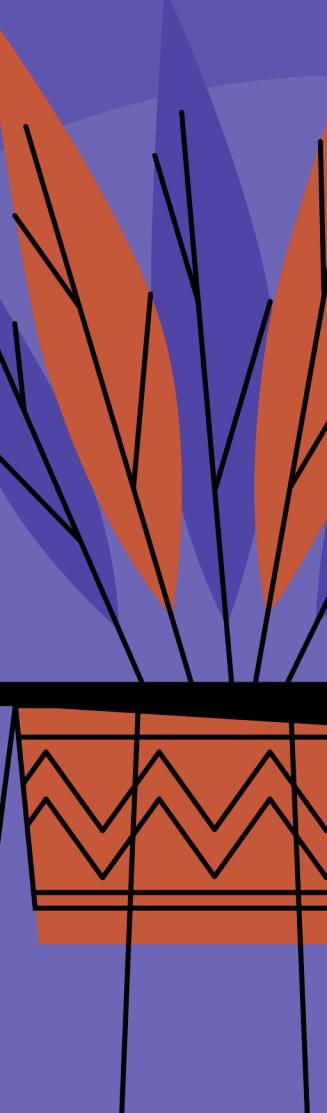
- Power BI

- Tableau



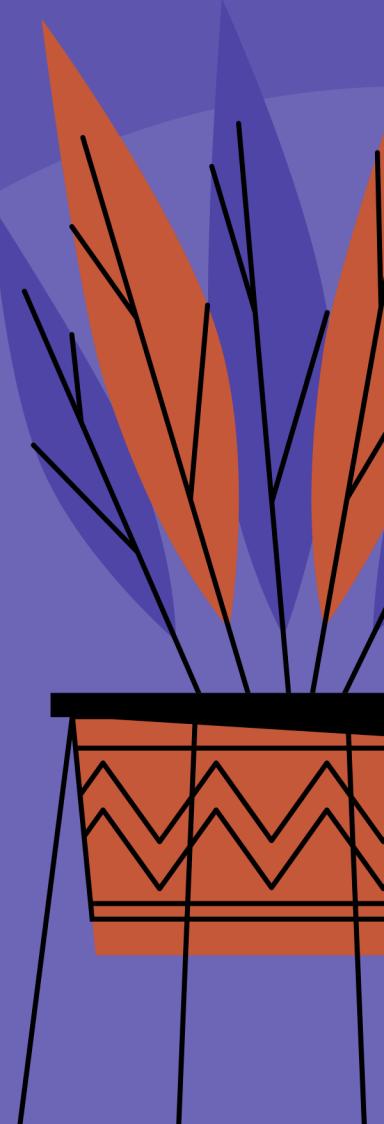


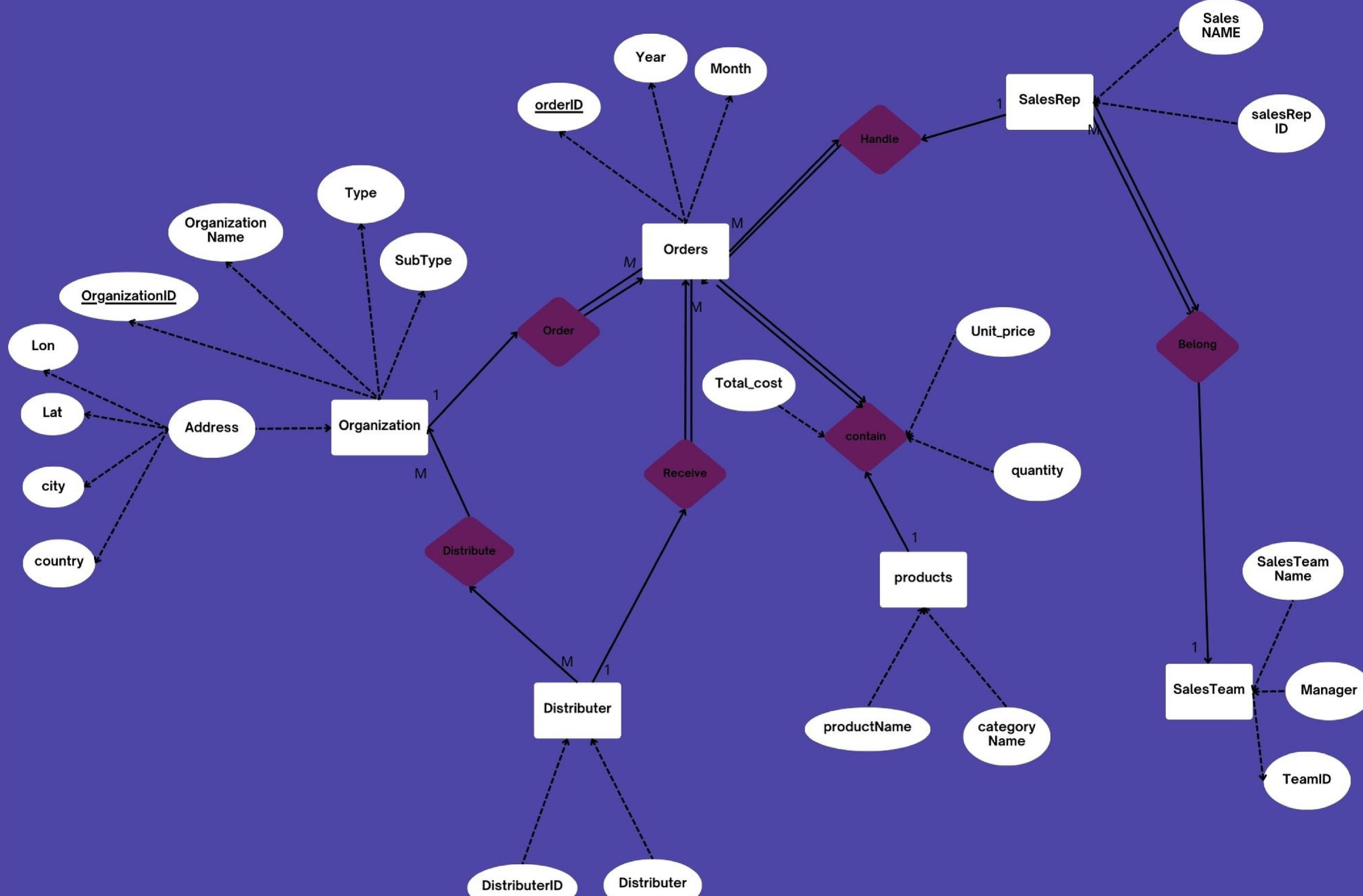
Data Cleaning





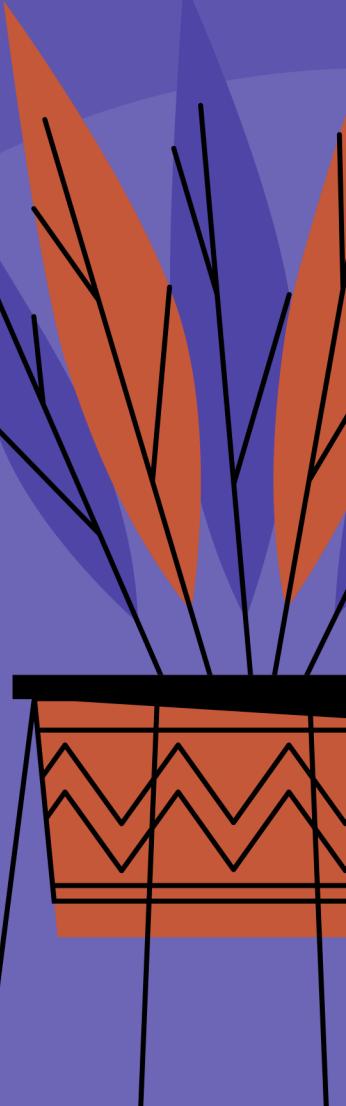
ERD

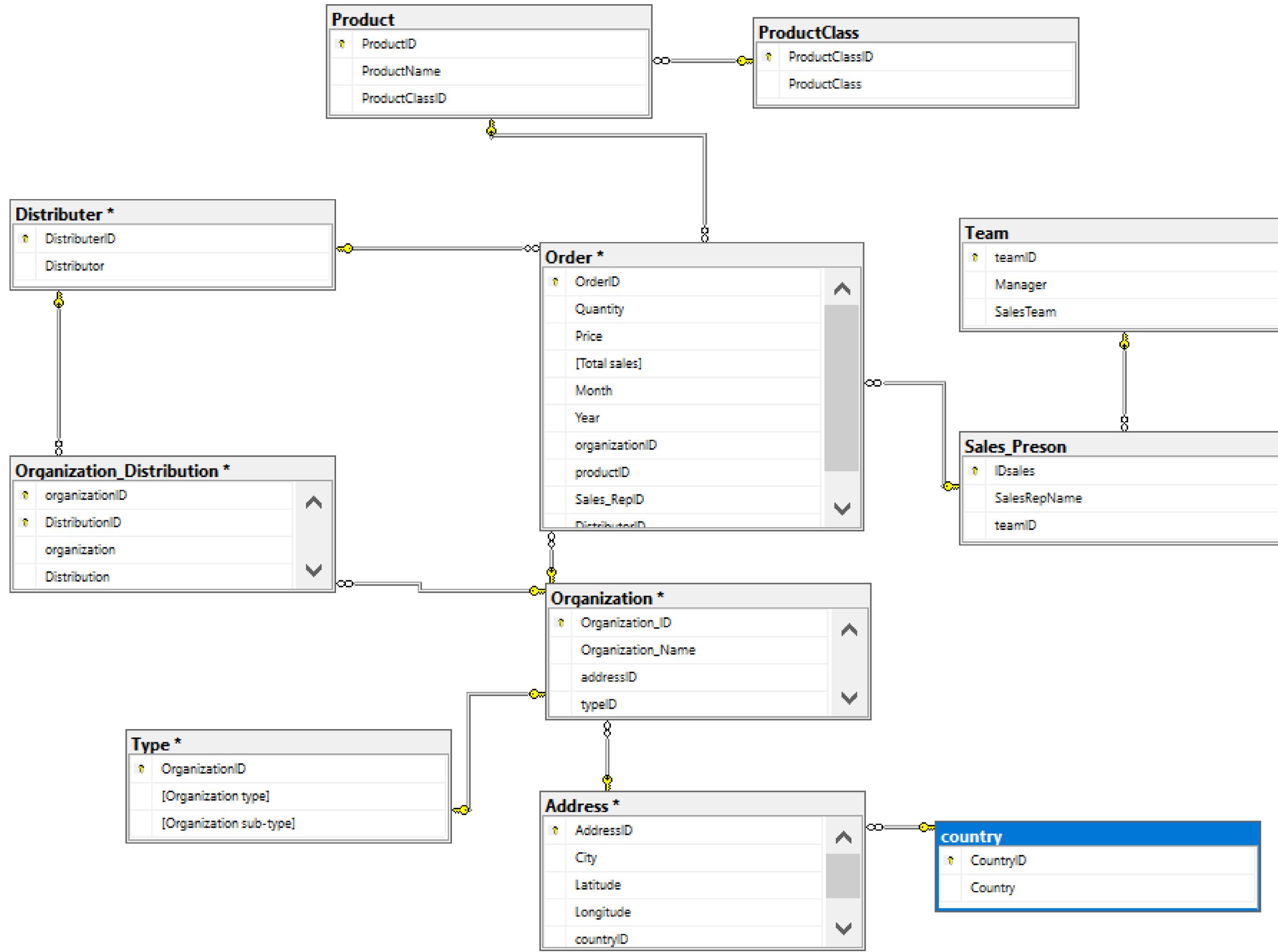






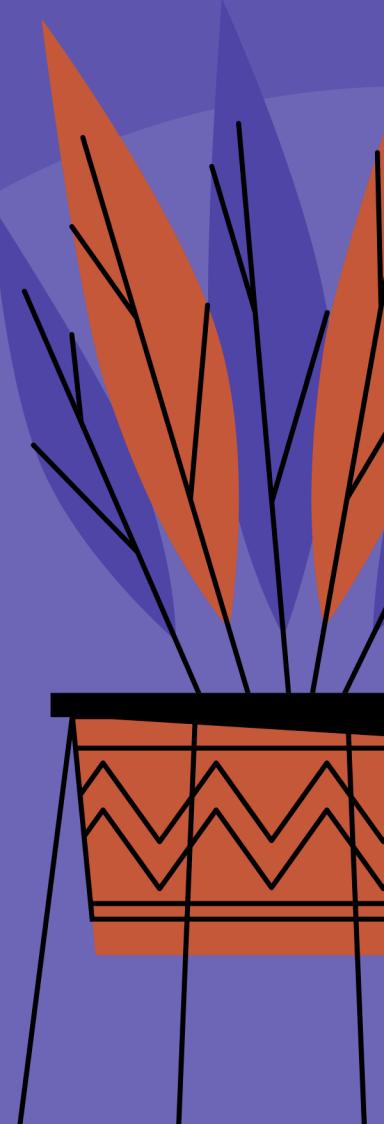
Mapping







SQL





SQL ANALYSIS

- What is the Total num of orders?
- what is the sum of total sales?
- what is the total num of organizations?
- what is the total number of units sold?



SQL ANALYSIS

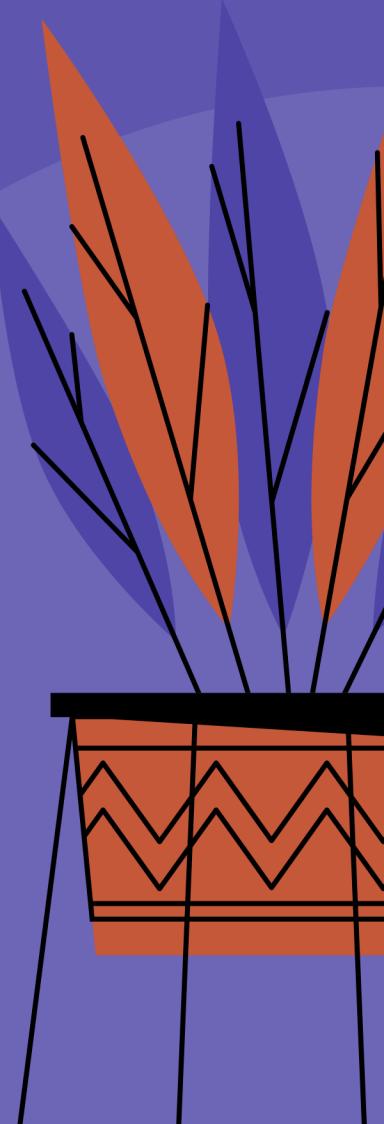
- what is the best 10 Costumers?
- Make a comparison between Germany and Poland in sales
- Find total sales in each single year?
- Make a filter that shows measures in specific year





SQL ANALYSIS

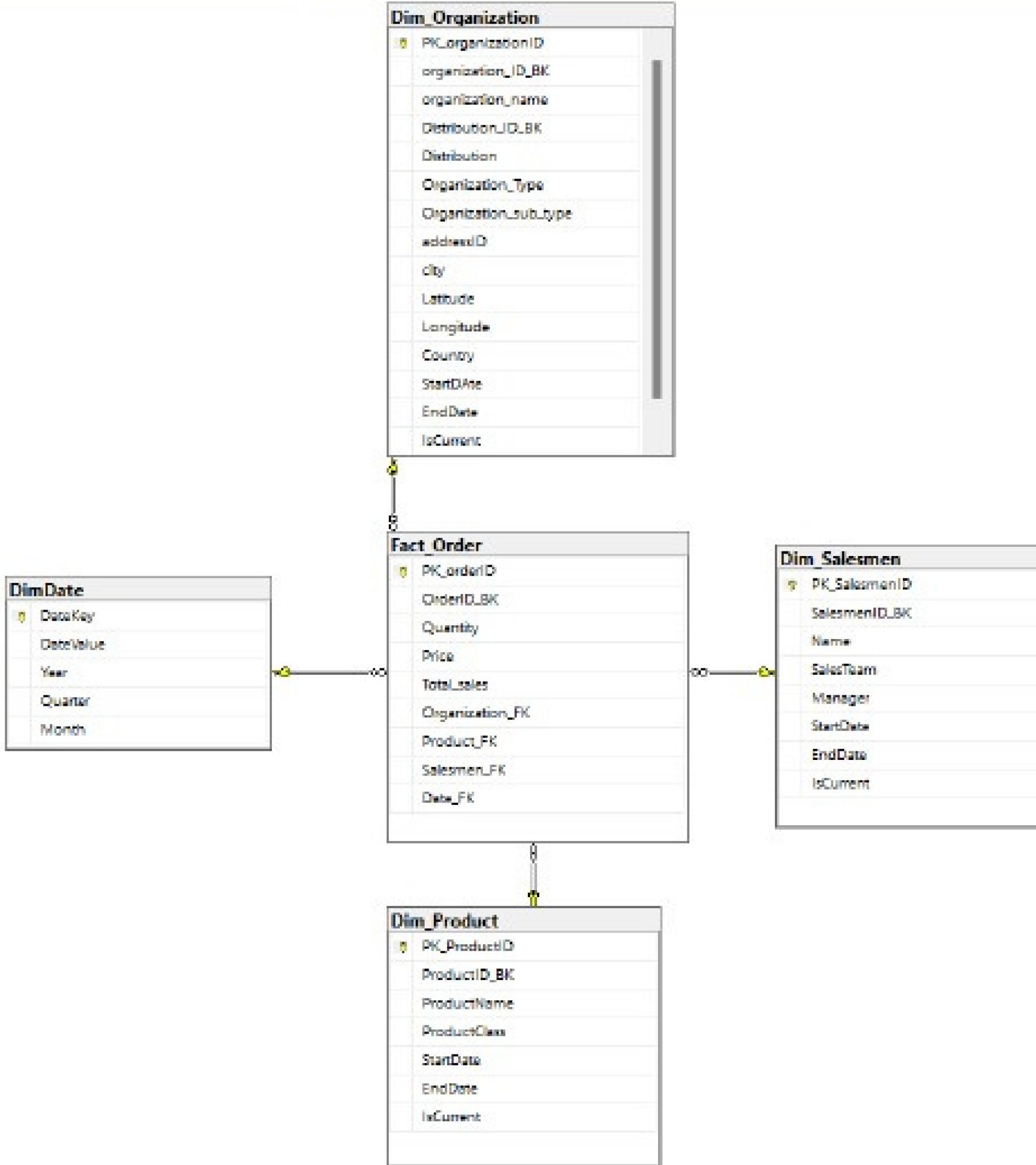
- what is the best trendy 10 products?
- what is the best trendy 10 product classes?
- what is the best 2 products in each product classes?





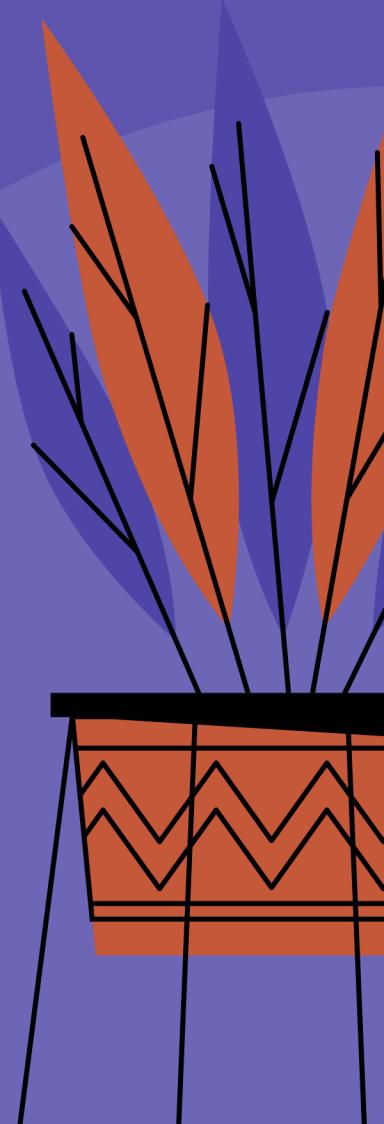
Data warehouse





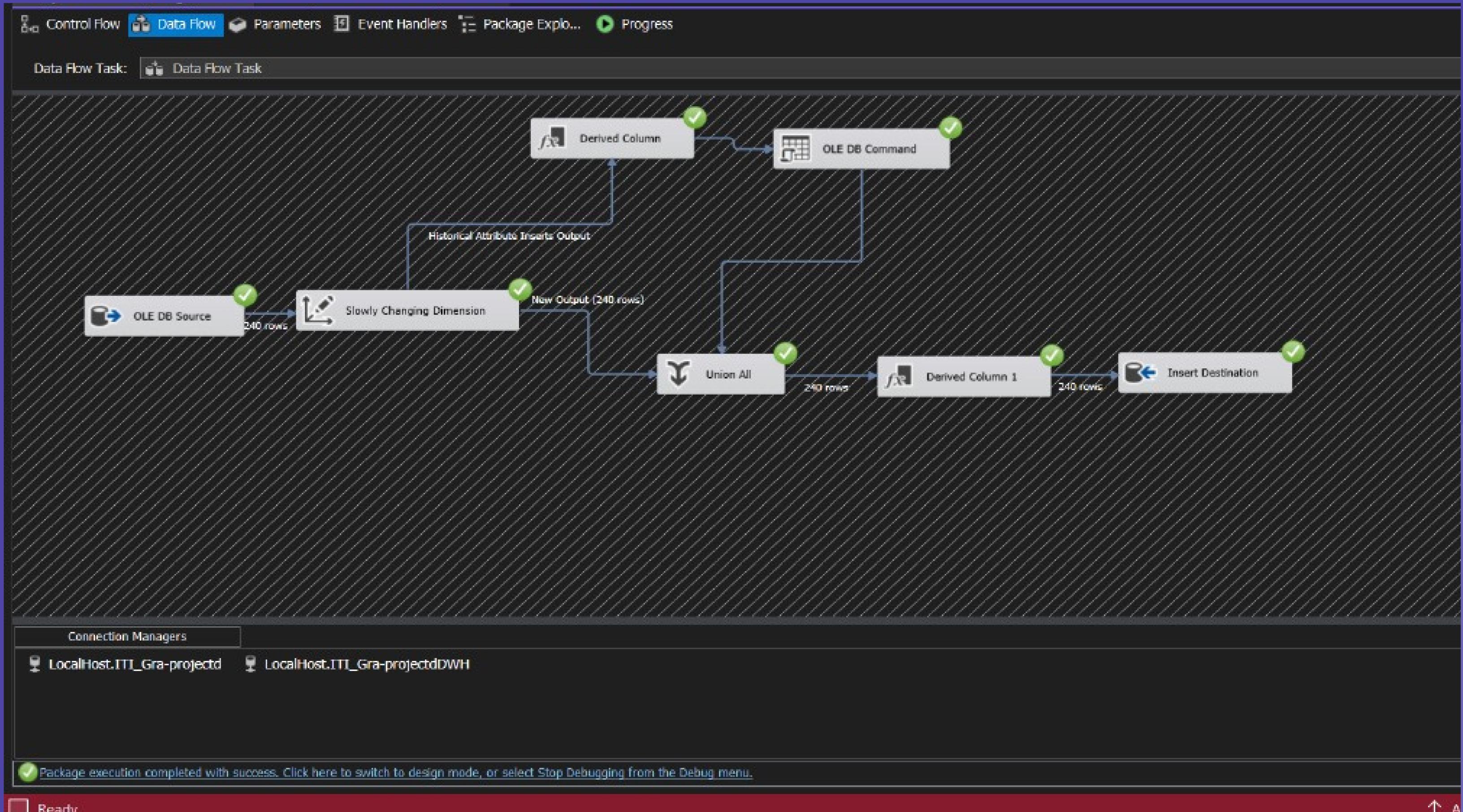


ssis

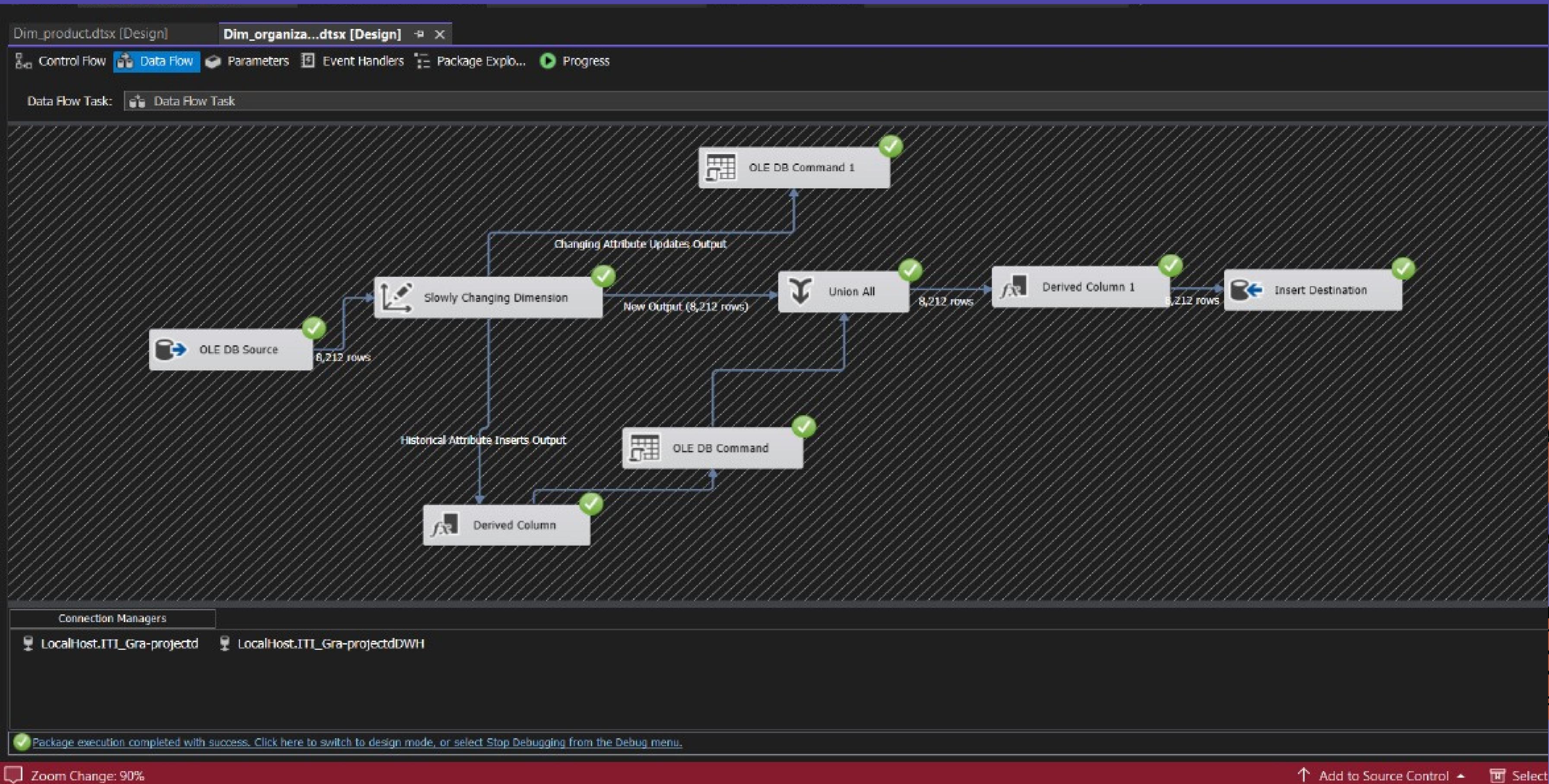




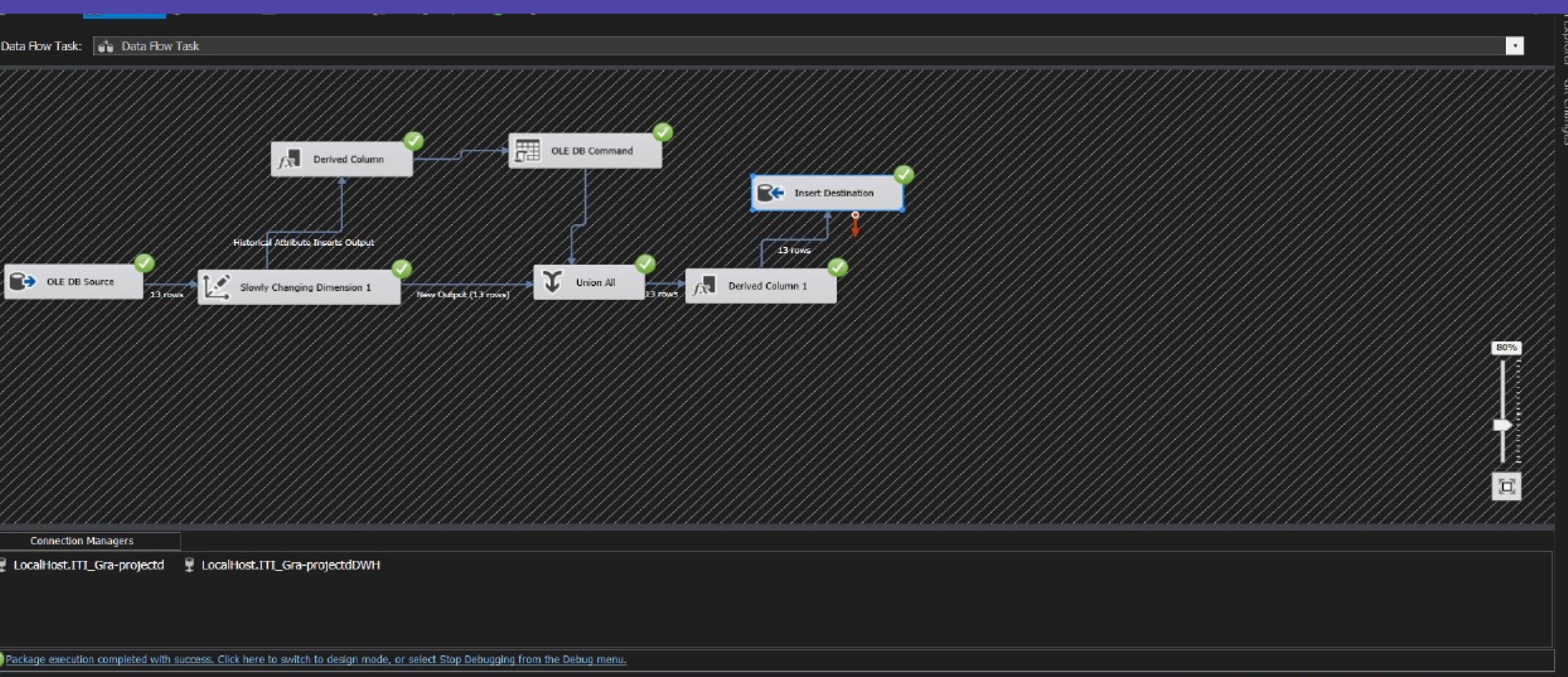
DIM_Product



DIM_Organization



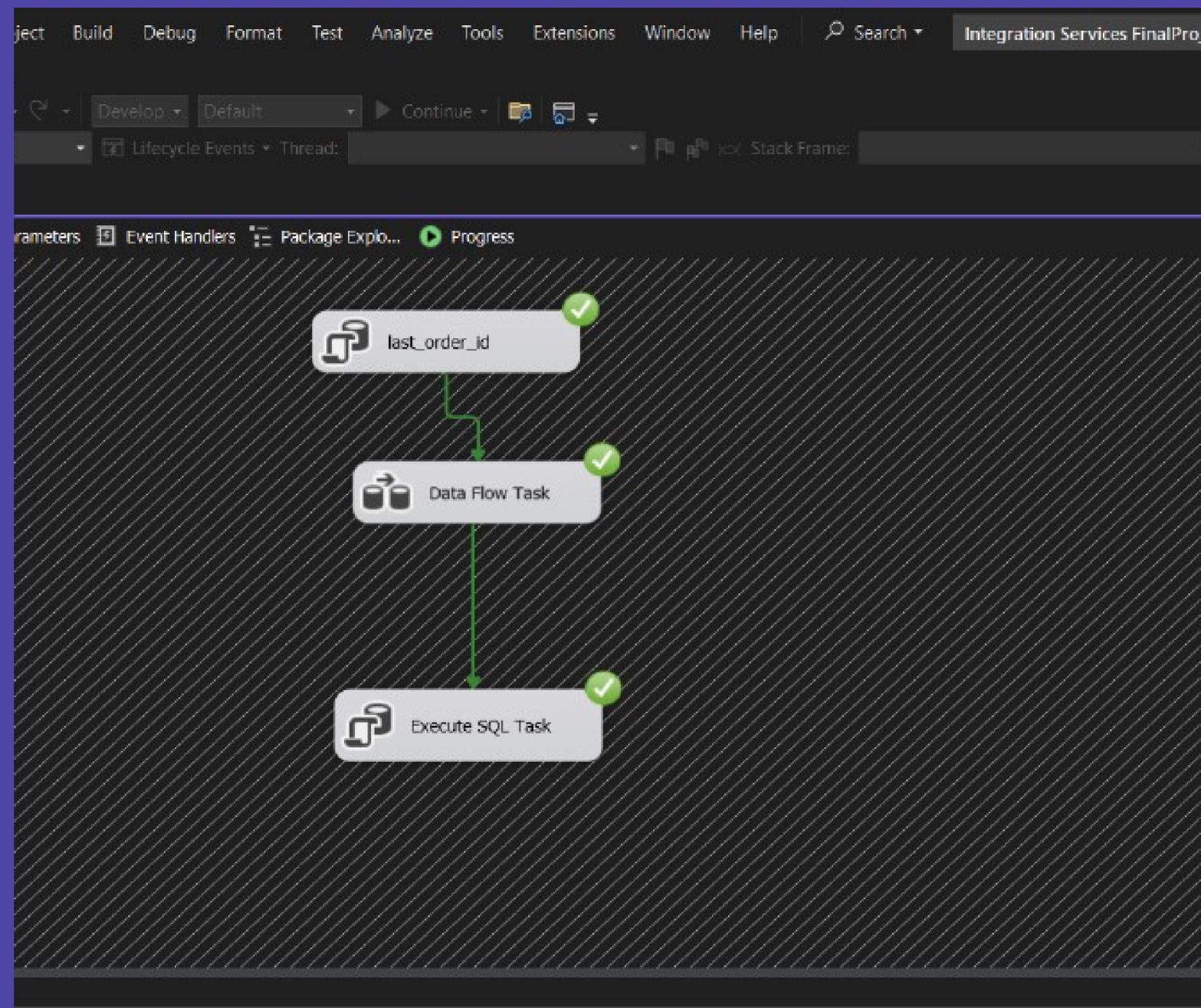
DIM_Salesman



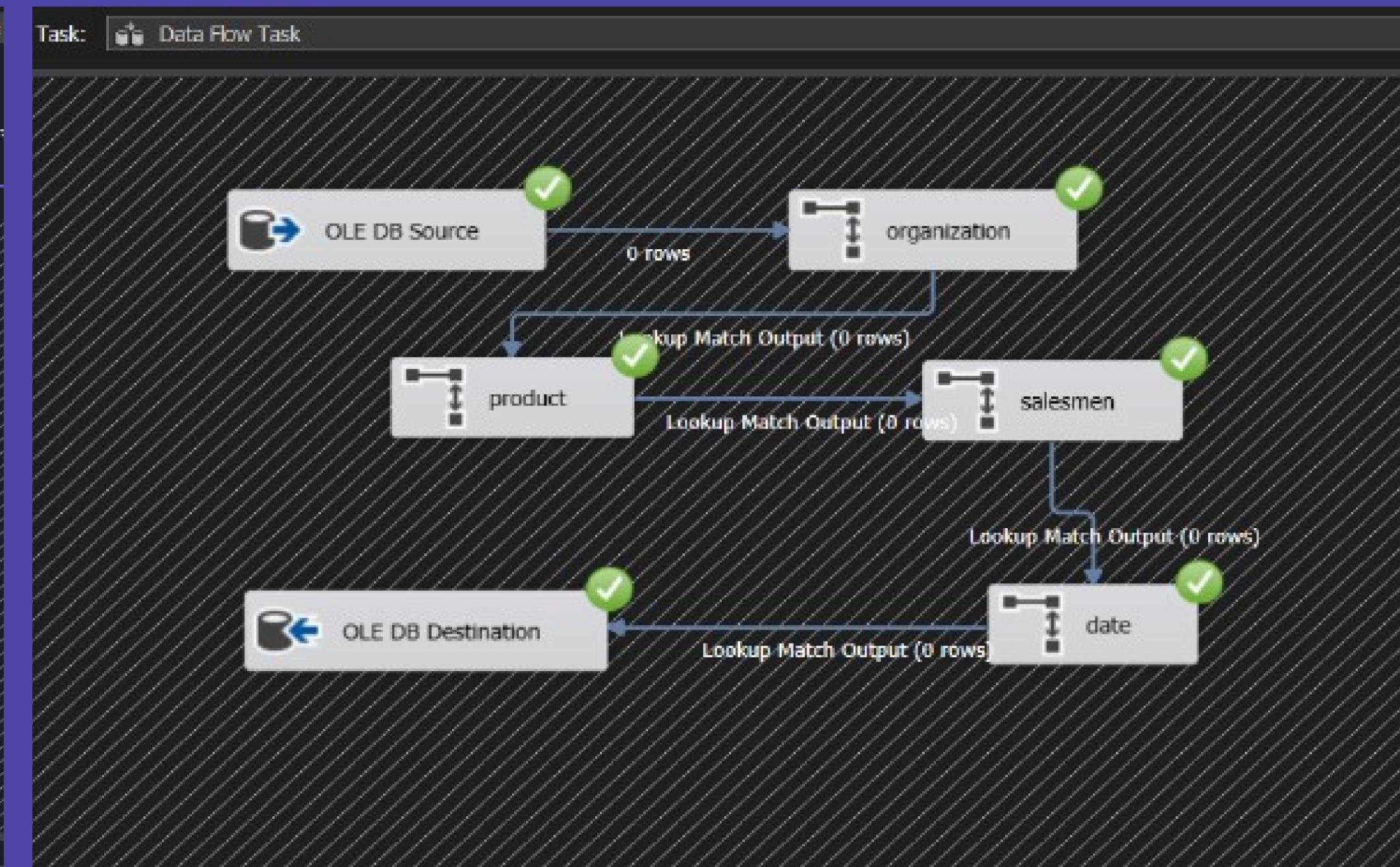
Fact_Order



Control Flow

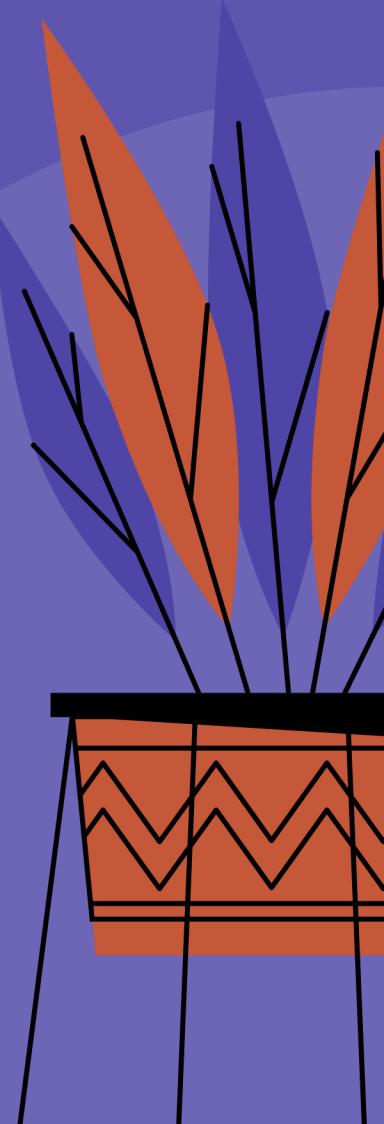


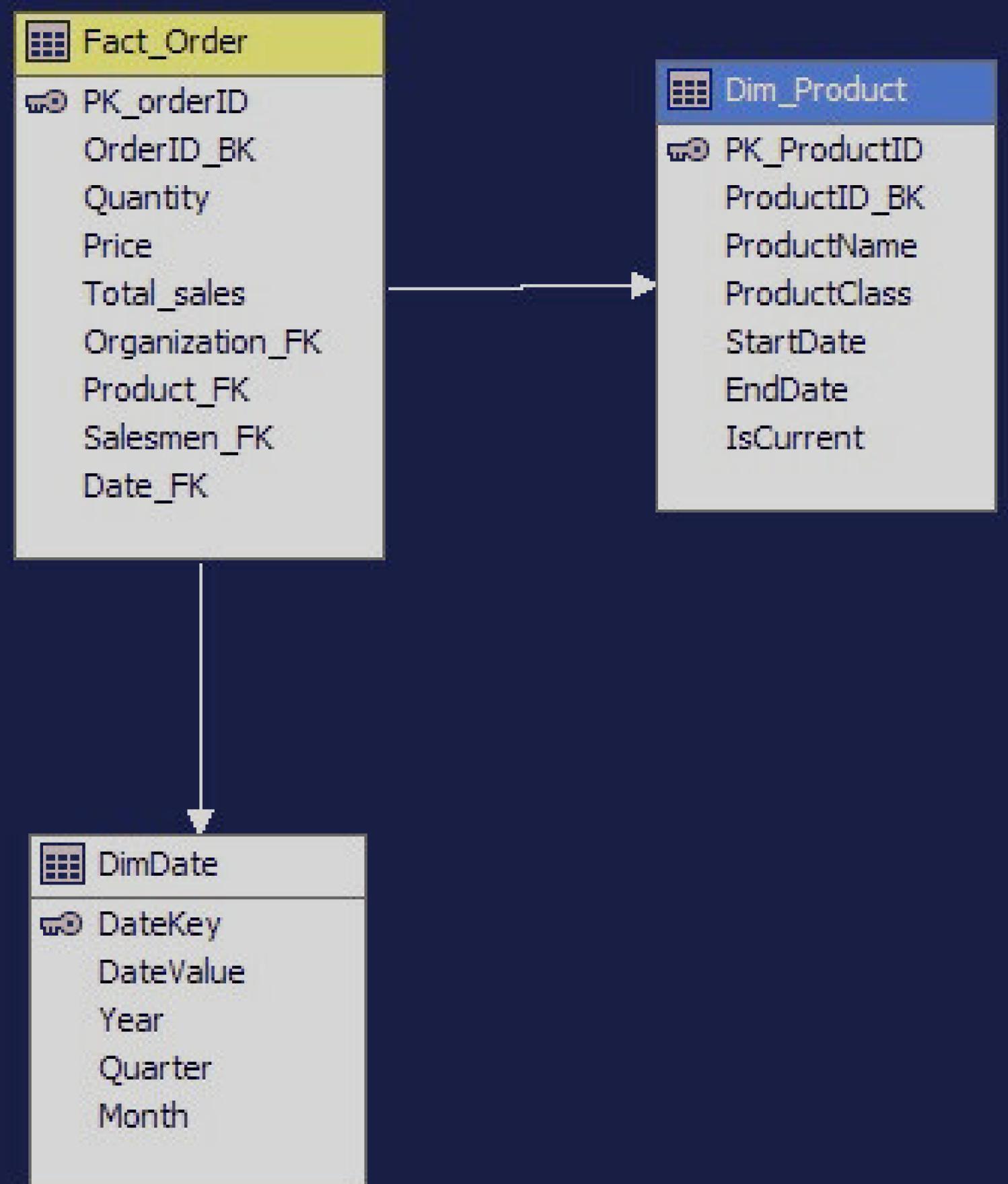
Data Flow





SSAS





Language: Default

Edit as Text Import... MDX

Dimension Hierarchy Operator Filter Expression Parameters

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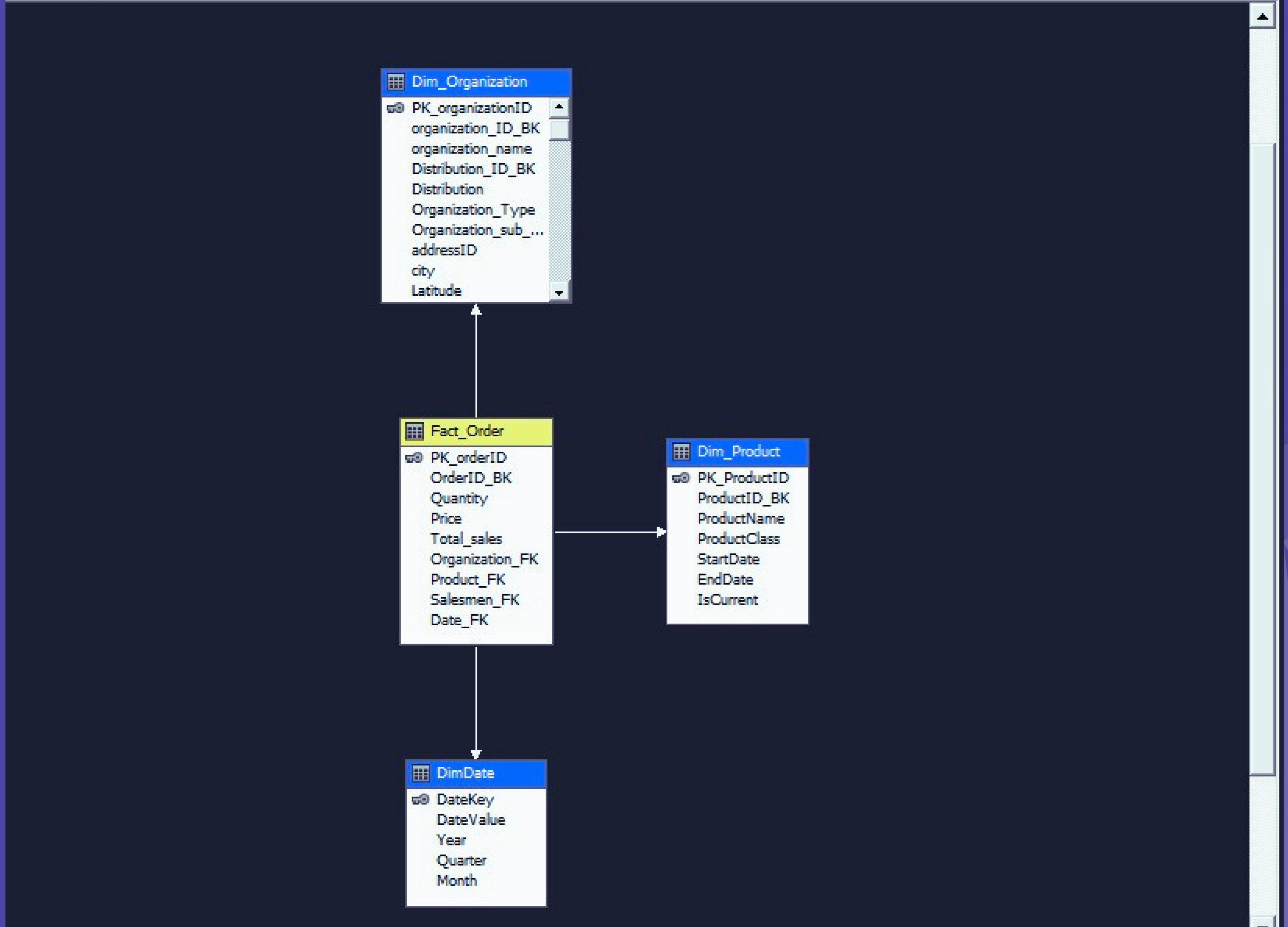
Distribution ID BK Distribution Organization Name Organization Type Product Name Quantity

Distribution ID BK	Distribution	Organization Name	Organization Type	Product Name	Quantity
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Abilovir Aprotasol	8
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Abobozolid	18
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Abranatal Lysoprosate	2
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Acantaine	5
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Acelimus	1
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Aciprex	2
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adonuma	10
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Acubulin	10
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Acycnafine Microvate	10
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Acycpex	4
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adalatamine	1
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adideine	35
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adrecetam Barazox...	2
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adriacaine	47
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adriafinil Ehtymara	8
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Adtiza Gammaluble	92
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Afaxacin	10
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Afinitasol	2
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Agalsiline	30
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Aggrakine	8
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Agretisol	6
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Albudazole Erobloc	29
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Albuterenone	50
1	Gottlieb	Abernathy Group Pharmaceutical Limited	Hospital	Alemtuvatol Megalinum	20





Dimension	Hierarchy	Operator	Filter Expression			
<Select dimension>						
Distribution	Organization Name	Manager	Sales Team	Total Sales	TOTAL Goal	TOTAL Status
Gerlach LLC	Johnson, Friesen ...	Alisha C...	Charlie	686810	10000	1
Gerlach LLC	Johnson, Friesen ...	Britann...	Delta	1090303	10000	1
Gerlach LLC	Johnson, Friesen ...	James ...	Alfa	654999	10000	1
Gerlach LLC	Johnson, Friesen ...	Tracy B...	Bravo	906206	10000	1
Gerlach LLC	Johnson, Friesen ...	Unknown	Unknown	(null)	10000	-1
Gerlach LLC	Keeling LLC Pharm...	Alisha C...	Charlie	926180	10000	1
Gerlach LLC	Keeling LLC Pharm...	Britann...	Delta	1154522	10000	1
Gerlach LLC	Keeling LLC Pharm...	James ...	Alfa	849673	10000	1
Gerlach LLC	Keeling LLC Pharm...	Tracy B...	Bravo	853806	10000	1
Gerlach LLC	Keeling LLC Pharm...	Unknown	Unknown	(null)	10000	-1
Gerlach LLC	Kertzmann, Quitz...	Alisha C...	Charlie	896264	10000	1
Gerlach LLC	Kertzmann, Quitz...	Britann...	Delta	965727	10000	1
Gerlach LLC	Kertzmann, Quitz...	James ...	Alfa	889375	10000	1
Gerlach LLC	Kertzmann, Quitz...	Tracy B...	Bravo	994316	10000	1
Gerlach LLC	Kertzmann, Quitz...	Unknown	Unknown	(null)	10000	-1
Gerlach LLC	Kertzmann-Ward ...	Alisha C...	Charlie	837337	10000	1
Gerlach LLC	Kertzmann-Ward ...	Britann...	Delta	1079837	10000	1
Gerlach LLC	Kertzmann-Ward ...	James ...	Alfa	685749	10000	1
Gerlach LLC	Kertzmann-Ward ...	Tracy B...	Bravo	789404	10000	1
Gerlach LLC	Kertzmann-Ward ...	Unknown	Unknown	(null)	10000	-1
Gerlach LLC	Kihn Group	Alisha C...	Charlie	1098219	10000	1
Gerlach LLC	Kihn Group	Britann...	Delta	1140852	10000	1
Gerlach LLC	Kihn Group	James ...	Alfa	557096	10000	1
Gerlach LLC	Kihn Group	Tracy B...	Bravo	942832	10000	1





Cube Structure Dimension Usage Calculations KPIs Actions Partitions Aggregations Perspectives Translations Browser

Language: Default

Edit as Text Import... MDX

Dimension Hierarchy Operator Filter Expression Parameters

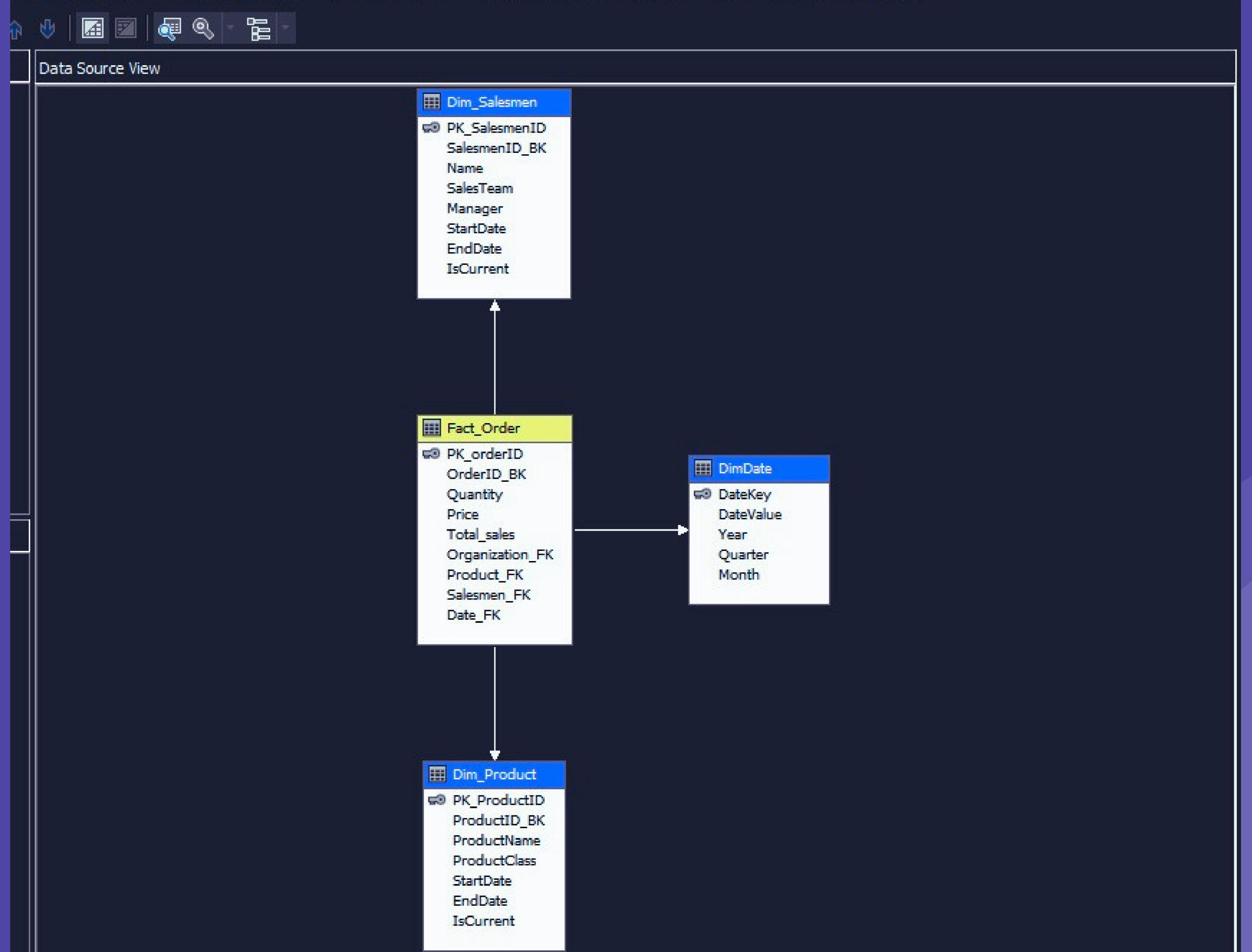
<Select dimension>

Metadata Search Model

Organization_cube <All>

PK Organization ID	Organization Name	Organization Type	Organization Sub Type	Address ID	City	Country	Fact Order Count
1	Jast-Cruickshank ...	Pharmacy	Retail	67	Bia...	Poland	196
12	Hills, Stroman and...	Hospital	Private	68	Pu...	Poland	184
25	Schinner, Gaylord ...	Hospital	Government	69	DÄ...	Poland	191
35	Graham and Sons ...	Hospital	Private	70	Wa...	Poland	190
45	Stehr-Champlin Ph...	Hospital	Government	71	No...	Poland	210
56	Mann-Waelchi Pharm	Hospital	Private	72	Pio...	Poland	184
67	Haley PLC Pharma...	Pharmacy	Retail	73	Opole	Poland	179
78	Denesik-Hintz Pharm	Pharmacy	Retail	74	Mi...	Poland	211
89	Rosenbaum, Klein ...	Hospital	Private	75	Zb...	Poland	183
100	Trantow LLC Phar...	Pharmacy	Retail	76	Bra...	Poland	163
109	Hill Ltd	Pharmacy	Retail	77	Gli...	Poland	197
119	Leannon-West Ph...	Pharmacy	Retail	78	Cie...	Poland	193
131	Kub, Von and Her...	Hospital	Private	79	Ws...	Poland	182
142	Welch-Orn	Hospital	Private	80	Ch...	Poland	166
153	Purdy Ltd Pharma...	Hospital	Government	81	GÅ...	Poland	166
163	Balistreri-Watsica ...	Pharmacy	Retail	82	EÅk	Poland	218
174	Herman, Rice and ...	Hospital	Government	83	ZIÄ...	Poland	194
184	Kertzmann-Ward ...	Pharmacy	Institution	84	Op...	Poland	185
193	Streich PLC Pharm...	Pharmacy	Institution	85	Prz...	Poland	196
204	Upton, Abernathy...	Hospital	Government	86	Jar...	Poland	201
216	Kilback, Beer and ...	Pharmacy	Retail	88	Kutno	Poland	190
226	Kunze PLC Pharm	Hospital	Private	89	Da...	Poland	198
238	Lesch PLC Pharmacy	Hospital	Private	90	Wr...	Poland	172
247	Hermiston LLC	Pharmacy	Institution	91	Str...	Poland	202

Tabs Multidi...Project
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Cube Structure Dimension Usage Calculations KPIs Actions Partitions Aggregations Perspectives Translations Browser

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Dimension Hierarchy Operator Filter Expression Parameters

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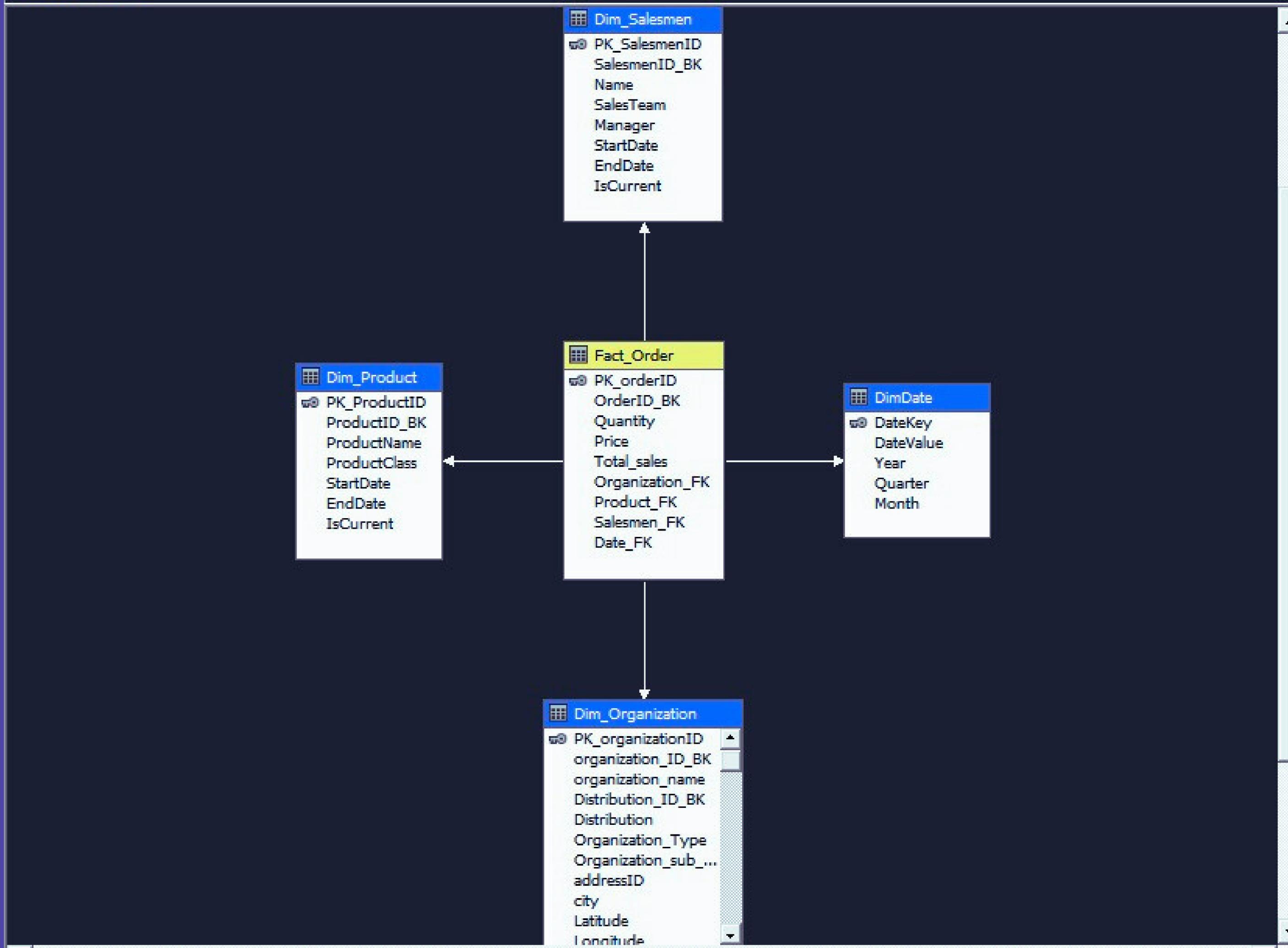
Dimension Hierarchy Operator Filter Expression Parameters

PK Salesmen ID Sales Team Name Manager PK Product ID Product Name Fact Order Count

PK Salesmen ID	Sales Team	Name	Manager	PK Product ID	Product Name	Fact Order Count
1	Delta	Mary Gerrard	Britanny Bold	1	Topipizole	65
1	Delta	Mary Gerrard	Britanny Bold	2	Pazofenac	71
1	Delta	Mary Gerrard	Britanny Bold	3	Morphizolid Tianalin	74
1	Delta	Mary Gerrard	Britanny Bold	4	Lovapur	71
1	Delta	Mary Gerrard	Britanny Bold	5	Trazobalamin	68
1	Delta	Mary Gerrard	Britanny Bold	6	Exotropin Empazine	61
1	Delta	Mary Gerrard	Britanny Bold	7	Spiroderall	72
1	Delta	Mary Gerrard	Britanny Bold	8	Invisteride Diclomycin	66
1	Delta	Mary Gerrard	Britanny Bold	9	Ergometrate	67
1	Delta	Mary Gerrard	Britanny Bold	10	Lovavatol Azelavarix	68
1	Delta	Mary Gerrard	Britanny Bold	11	Testant	65
1	Delta	Mary Gerrard	Britanny Bold	12	Propralamide Dexlan...	74
1	Delta	Mary Gerrard	Britanny Bold	13	Factofibrate	64
1	Delta	Mary Gerrard	Britanny Bold	14	Palodizem	75
1	Delta	Mary Gerrard	Britanny Bold	15	Veratorol Cidovatol	69
1	Delta	Mary Gerrard	Britanny Bold	16	Trazozaprine	64
1	Delta	Mary Gerrard	Britanny Bold	17	Clinolan Pitoletra	77
1	Delta	Mary Gerrard	Britanny Bold	18	Solasteride	71
1	Delta	Mary Gerrard	Britanny Bold	19	Malavirine Alimidine	78
1	Delta	Mary Gerrard	Britanny Bold	20	Xenaderal	68
1	Delta	Mary Gerrard	Britanny Bold	21	Antaparin Varizyme	56
1	Delta	Mary Gerrard	Britanny Bold	22	Adriacaine	61
1	Delta	Mary Gerrard	Britanny Bold	23	Lacoplex Hyaluvance	79
1	Delta	Mary Gerrard	Britanny Bold	24	Hepavice	59

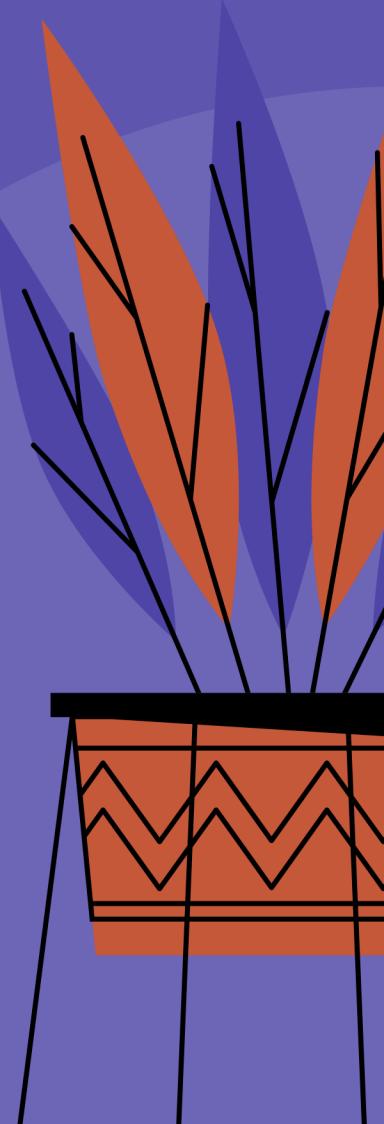
Metadata Search Model <All> salesmen_cube Measures Fact Order Fact Order Count Order ID BK Organization FK Price Quantity Total Sales KPIs Dim Date 2 Date Key Date Value Month Quarter Year Dim Product 2 PK Product ID Product Class Product ID BK Product Name Dim Salesmen 1

Data Source View





SSRS





Product Report

Product ID	Product Name	Product Class
1	Topipizole	MOOD STABILIZERS
2	Pazofenac	MOOD STABILIZERS
3	Morphizolid Tianalin	MOOD STABILIZERS
4	Lovapur	MOOD STABILIZERS
5	Trazobalamin	MOOD STABILIZERS
6	Exotropin Empazine	MOOD STABILIZERS
7	Spiroderall	MOOD

Total sales	Organization FK	Product FK	Salesmen FK
4137	976	78	
1980	966	79	



Sales Report

order ID	Quantity	Price	Total sales	Organization FK	Product FK	Salesmen FK
1	7	591	4137	976	78	2
2	30	66	1980	966	79	3
3	6	435	2610	956	80	1
4	20	458	9160	946	81	4
5	5	123	615	935	2	5
6	20	536	10720	926	83	6
7	5	742	3710	914	3	1
8	4	551	2204	902	4	7
9	10	243	2430	893	82	8
10	35	762	26670	883	5	9
11	4	249	996	872	170	10
12	5	785	3925	861	6	10
13	6	286	1716	852	171	2
14	7	677	4739	841	172	1



SalesMan Report

Salesmen ID	Name	Sales Team	Manager
1	Mary Gerard	Delta	Britanny Bold
2	Jess ice Smith	Delta	Britanny Bold
3	Steve Pepple	Bravo	Tracy Banks
4	Anne Wu	Delta	Britanny Bold
5	Thompson Crawford	Alfa	James Goodwill
6	Sheila Stones	Delta	Britanny Bold
7	Stella Given	Charlie	Ais ha Cordwell
8	Morris Garcia	Bravo	Tracy Banks
9	Erica Jones	Alfa	James Goodwill
10	Abigail Thompson	Bravo	Tracy Banks
11	Daniel Gates	Charlie	Ais ha Cordwell
12	Alan Ray	Alfa	James Goodwill



1



100%

Find | Next

Organization Data

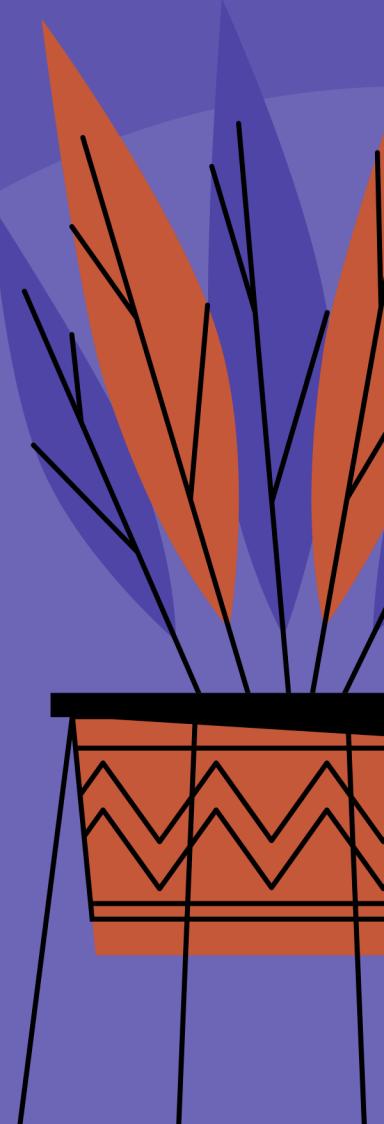
organization name	Distribution	Organization Type	Organization sub type	city	Latitude	Longitude
Jast-Cruickshank Pharma Plc	Gottlieb	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Carter	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Prohaska	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Smith Inc	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Rohan	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Schuppe Inc	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Cassin	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Stehr	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Rogahn	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Lindgren	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Jast-Cruickshank Pharma Plc	Beier	Pharmacy	Retail	BiaÅystok	53.1167	23.1667
Hills, Stroman and Ernsen Pharm	Gottlieb	Hospital	Private	PuÅtusk	52.7025	21.0828
Hills, Stroman and Ernsen Pharm	Carter	Hospital	Private	PuÅtusk	52.7025	21.0828



Quantity	Price	Total sales	Organization FK	Product FK	Salesmen FK	
4	154	616	100	15	12	
3	555	1665	1369	110	8	
10	713	7130	1271	231	13	
10	664	6640	769	67	3	
2	375	750	1106	123	12	
96	548	52608	1283	174	5	
30	708	21240	89	16	11	
32	458	14656	89	81	13	
96	131	12576	1391	49	3	
5	66	330	1176	79	7	
20	658	13160	718	41	11	
1	307	307	1116	169	2	
10	605	6050	1239	119	1	
20	345	6900	193	108	6	
20	604	12080	1106	9	2	
40	318	12720	603	153	12	
20	421	8420	1854	173	9	
72	187	13464	626	230	1	
0	511	4500	1510	229	12	

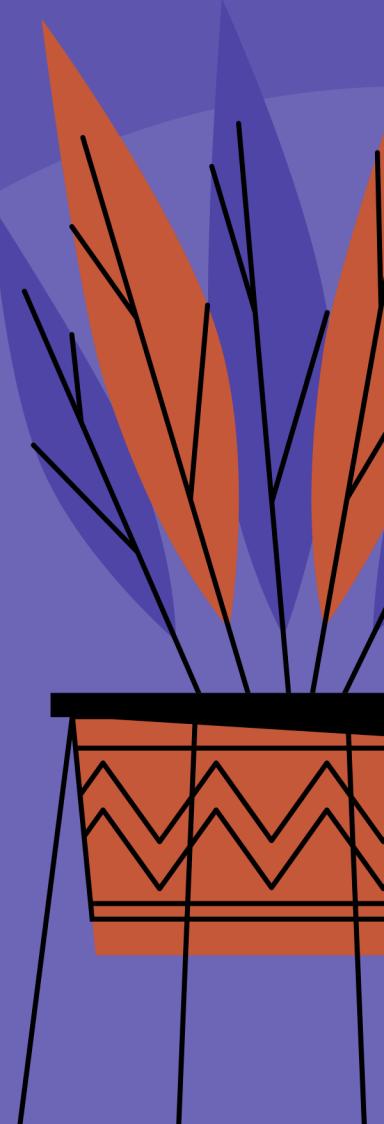


Power BI





Tableau





Thank you

