**Zadanie 1**



New Customer Update Table → StagingCustomer → Update Table → DimCustomers



Customers

1 001 rows

Lookup

Lookup Match Output (1 001 rows)

Conditional Split

insert (1 rows) → OLE DB Destination

update (1 rows) → OLE DB Destination 6
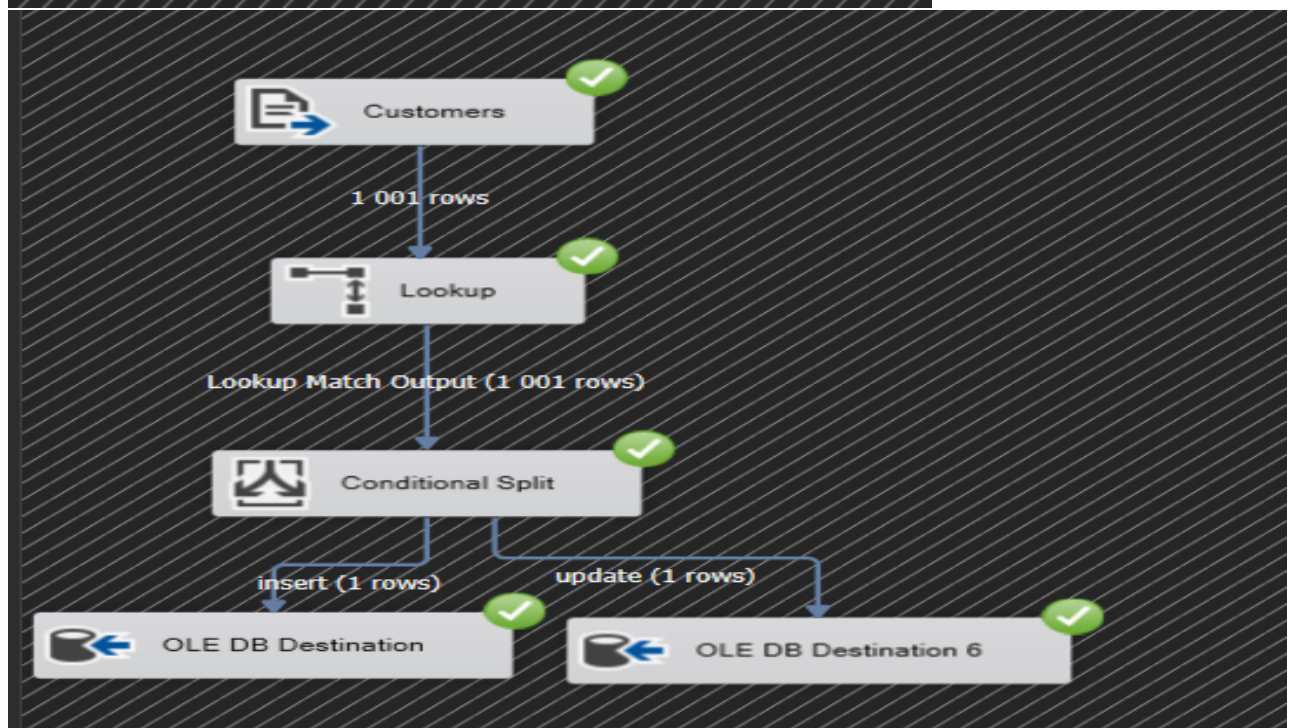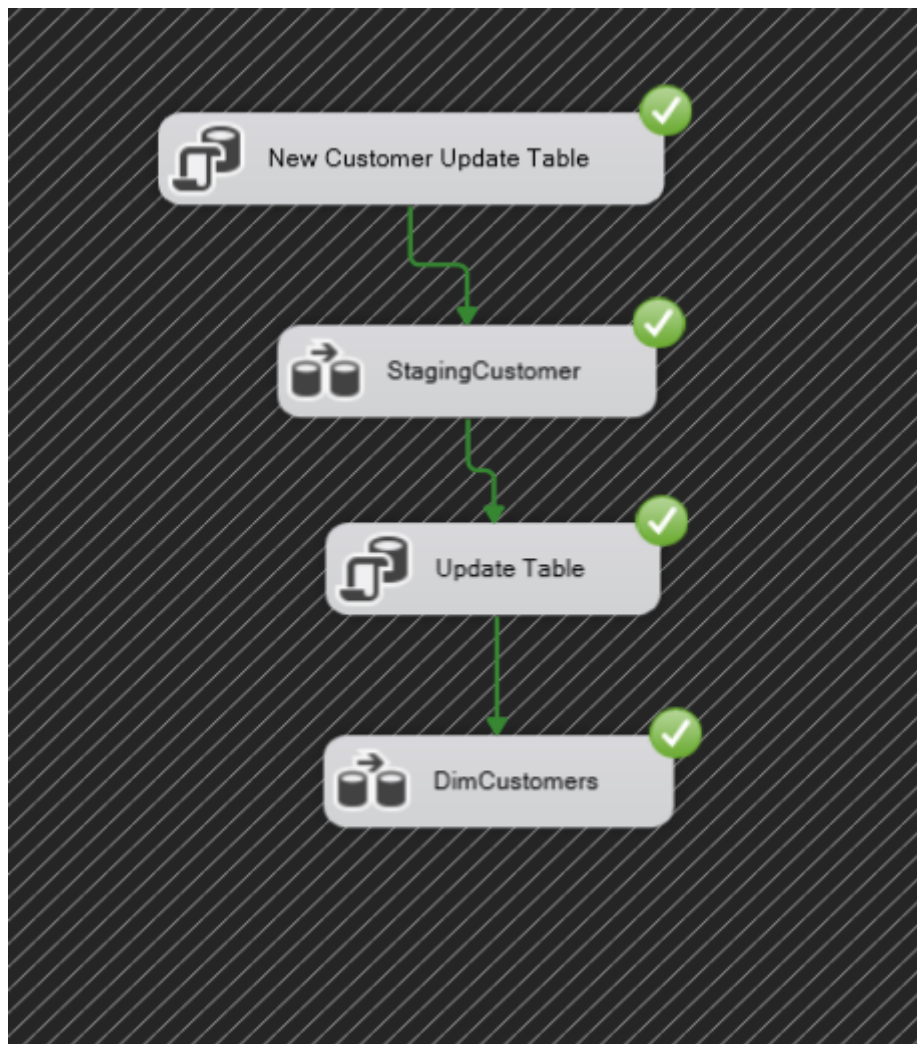
**Execute SQL Task Editor**

Configure the properties required to run SQL statements and stored procedures using the se...

General
Parameter Mapping
Result Set
Expressions

∨ **General**

Update

**Enter SQL Query**

```
USE [cwiczenia5_staging]
GO

/****** Object:  Table [dbo].[customers_update]    Script Date:
09.11.2022 01:25:11 ******/
IF EXISTS (SELECT * FROM sys.objects WHERE object_id =
OBJECT_ID(N'[dbo].[customers_update]') AND type in (N'U'))
DROP TABLE [dbo].[customers_update]
GO

/****** Object:  Table [dbo].[customers_update]    Script Date:
09.11.2022 01:25:11 ******/
SET ANSI_NULLS ON
GO

SET QUOTED_IDENTIFIER ON
GO

CREATE TABLE [dbo].[customers_update](
        [id] [smallint] NULL,
        [first_name] [varchar](11) NULL,
        [last_name] [varchar](15) NULL,
        [street] [varchar](31) NULL,
        [city] [varchar](27) NULL,
        [state] [varchar](25) NULL,
        [country] [varchar](13) NULL,
        [phone] [varchar](12) NULL,
        [email] [varchar](35) NULL,
        [output_id] [smallint] NULL,
        [output_first_name] [varchar](11) NULL,
        [output_last_name] [varchar](15) NULL,
        [output_street] [varchar](31) NULL
```

OK     Cancel

Connection Managers

rier  Customers  LocalHost.cwiczenia4  LocalHost.cwiczenia4_stagin

zenia5_st

_stagin

cel

---

New Customer Update Table

StagingCustomer

Update Table

DimCustomers

General
Parameter Mapping
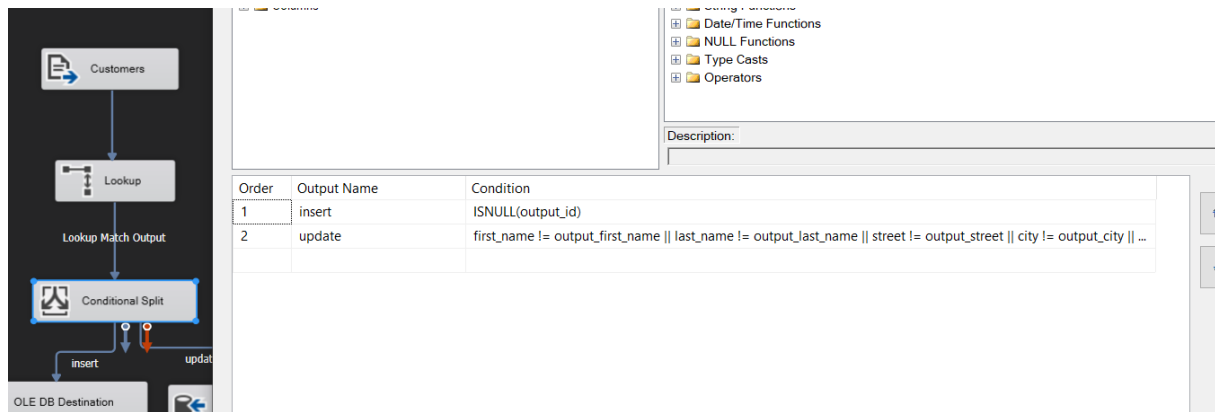Result Set
Expressions

∨ **General**

k

**Enter SQL Query**

```
update c
set c.first_name = cu.first_name,
c.last_name=cu.last_name,
c.street=cu.street,
c.city=cu.city,
c.state=cu.state,
c.country=cu.country,
c.phone=cu.phone,
c.email=cu.email
from Customers c
inner join customers_update cu on c.[id]=cu.[id];
```
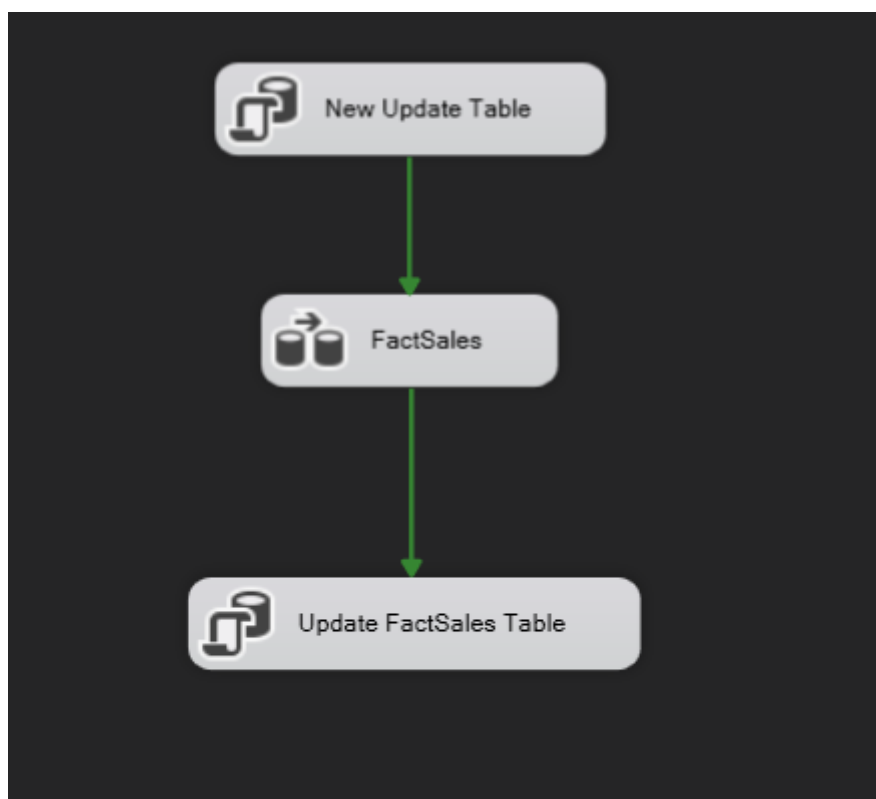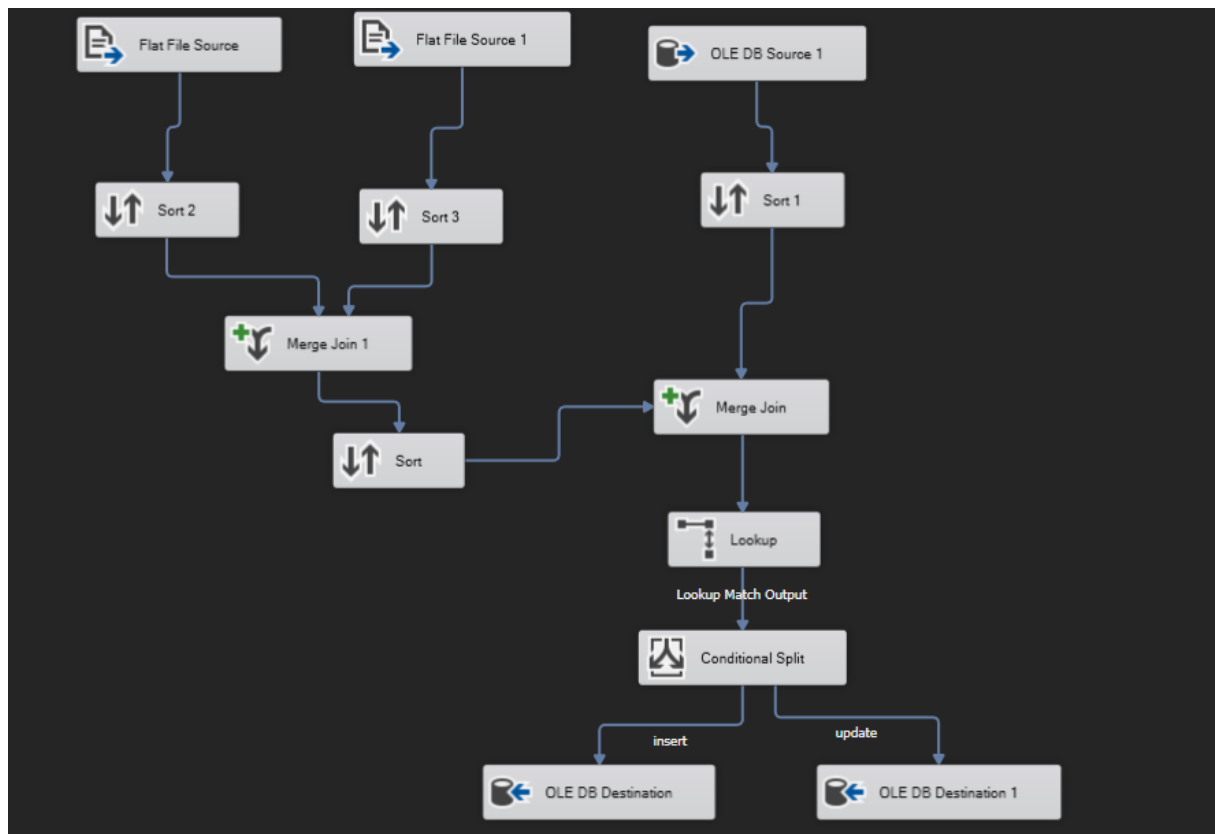
OK     Cancel

enia5_staging

st_name = cu.first_nar

Browse...     Build Query...     Parse Query

| | | | Date/Time Functions |
| | | | NULL Functions |
| | | | Type Casts |
| | | | Operators |

Description:

| Order | Output Name | Condition |
|---|---|---|
| 1 | insert | ISNULL(output_id) |
| 2 | update | first_name != output_first_name \|\| last_name != output_last_name \|\| street != output_street \|\| city != output_city \|\| ... |

Customers → Lookup → Lookup Match Output → Conditional Split → insert / updat → OLE DB Destination

## Zadanie 2



New Update Table → FactSales → Update FactSales Table

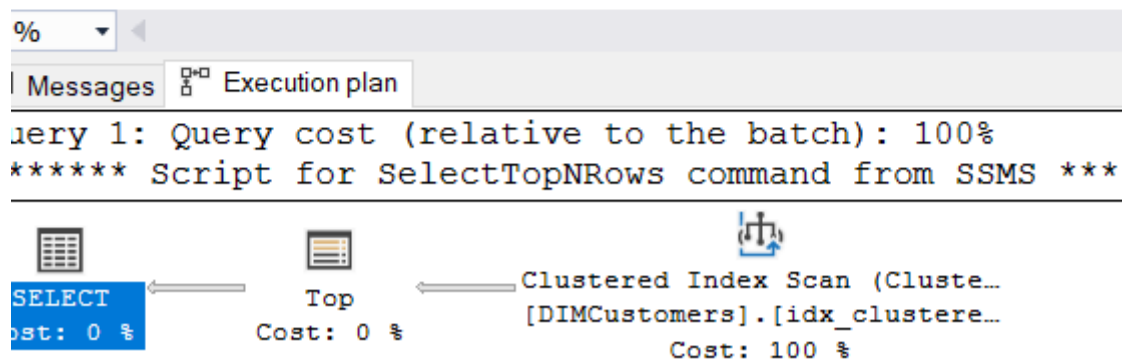| | CustomerKey | order_id | date | time | carrier_id | order_details_id | pizza_id | quantity |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1675 | 2015-01-29 | 1899-12-30 12:26:53.000 | 2 | 3774 | spicy_ital_s | 1 |
| 2 | 1 | 15360 | 2015-09-14 | 1899-12-30 12:57:49.000 | 4 | 34797 | hawaiian_s | 1 |
| 3 | 1 | 17801 | 2015-10-30 | 1899-12-30 21:11:15.000 | 2 | 40400 | sicilian_m | 1 |
| 4 | 1 | 1675 | 2015-01-29 | 1899-12-30 12:26:53.000 | 2 | 3773 | sicilian_l | 1 |
| 5 | 1 | 15166 | 2015-09-11 | 1899-12-30 13:15:14.000 | 3 | 34363 | veggie_veg_m | 1 |
| 6 | 1 | 17801 | 2015-10-30 | 1899-12-30 21:11:15.000 | 2 | 40401 | southw_ckn_l | 1 |
| 7 | 1 | 2884 | 2015-02-17 | 1899-12-30 22:06:26.000 | 1 | 6517 | hawaiian_l | 1 |
| 8 | 1 | 14973 | 2015-09-08 | 1899-12-30 11:47:21.000 | 1 | 33906 | classic_dlx_m | 1 |
| 9 | 1 | 19749 | 2015-12-02 | 1899-12-30 12:55:36.000 | 3 | 44932 | pep_msh_pep_m | 1 |
| 10 | 1 | 696 | 2015-01-12 | 1899-12-30 13:49:40.000 | 3 | 1558 | spicy_ital_s | 1 |
| 11 | 1 | 15166 | 2015-09-11 | 1899-12-30 13:15:14.000 | 3 | 34362 | spinach_supr_s | 1 |

**Zadanie 3**

```
CREATE CLUSTERED INDEX idx_clustered_on_state ON DIMCustomers(state);
```

```sql
/****** Script for SelectTopNRows command from SSMS ******/
SELECT TOP (1000) [idkey]
      ,[id]
      ,[first_name]
      ,[last_name]
      ,[street]
      ,[city]
      ,[state]
      ,[country]
      ,[phone]
      ,[email]
      ,[effStartDate]
      ,[effEndDate]
  FROM [cwiczenia5].[dbo].[DIMCustomers]
```

%  ▼ ◄

| Messages  ┃ Execution plan

uery 1: Query cost (relative to the batch): 100%
****** Script for SelectTopNRows command from SSMS ***

SELECT          Top              Clustered Index Scan (Cluste…
ost: 0 %        Cost: 0 %        [DIMCustomers].[idx_clustere…
                                          Cost: 100 %

**Zadanie 4**

```sql
CREATE VIEW FactsSalesCarrier WITH SCHEMABINDING AS
SELECT s.CustomerKey,s.order_id,s.date,s.time,s.carrier_id,s.order_details_id,s.pizza_id,s.quantity
,c.carrier_name,c.contact_person,c.address,c.tax_id
FROM [dbo].[FactSales] s
INNER JOIN [dbo].[Carrier] c
ON s.carrier_id=c.carrier_id;

CREATE UNIQUE CLUSTERED INDEX idx__clustered_view ON FactsSalesCarrier(
CustomerKey,order_id,date,time,carrier_id,order_details_id,pizza_id,quantity,carrier_name,contact_person,address,tax_id);
```
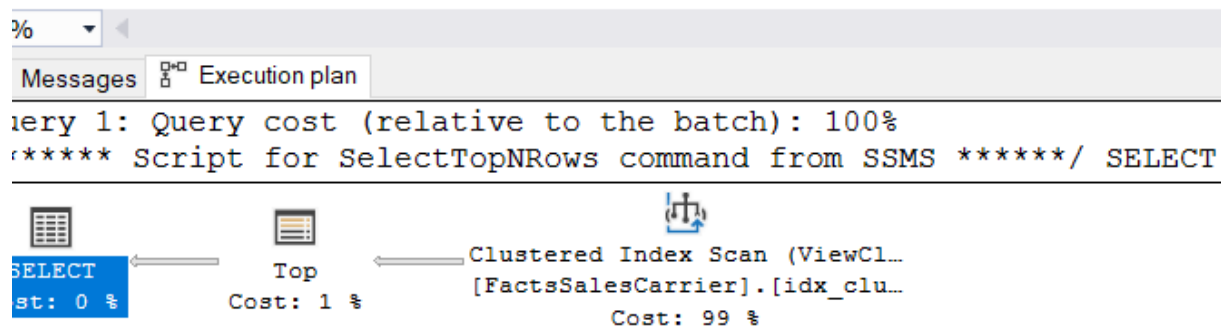
```
/****** Script for SelectTopNRows command from SSMS ******/
SELECT TOP (1000) [CustomerKey]
      ,[order_id]
      ,[date]
      ,[time]
      ,[carrier_id]
      ,[order_details_id]
      ,[pizza_id]
      ,[quantity]
      ,[carrier_name]
      ,[contact_person]
      ,[address]
      ,[tax_id]
  FROM [cwiczenia5].[dbo].[FactsSalesCarrier]
```
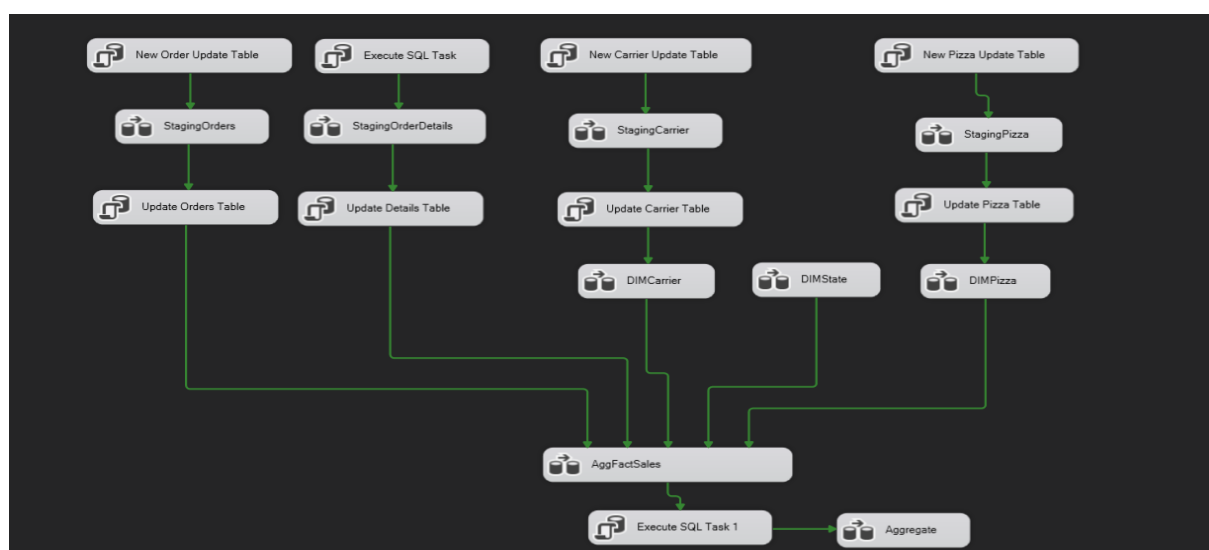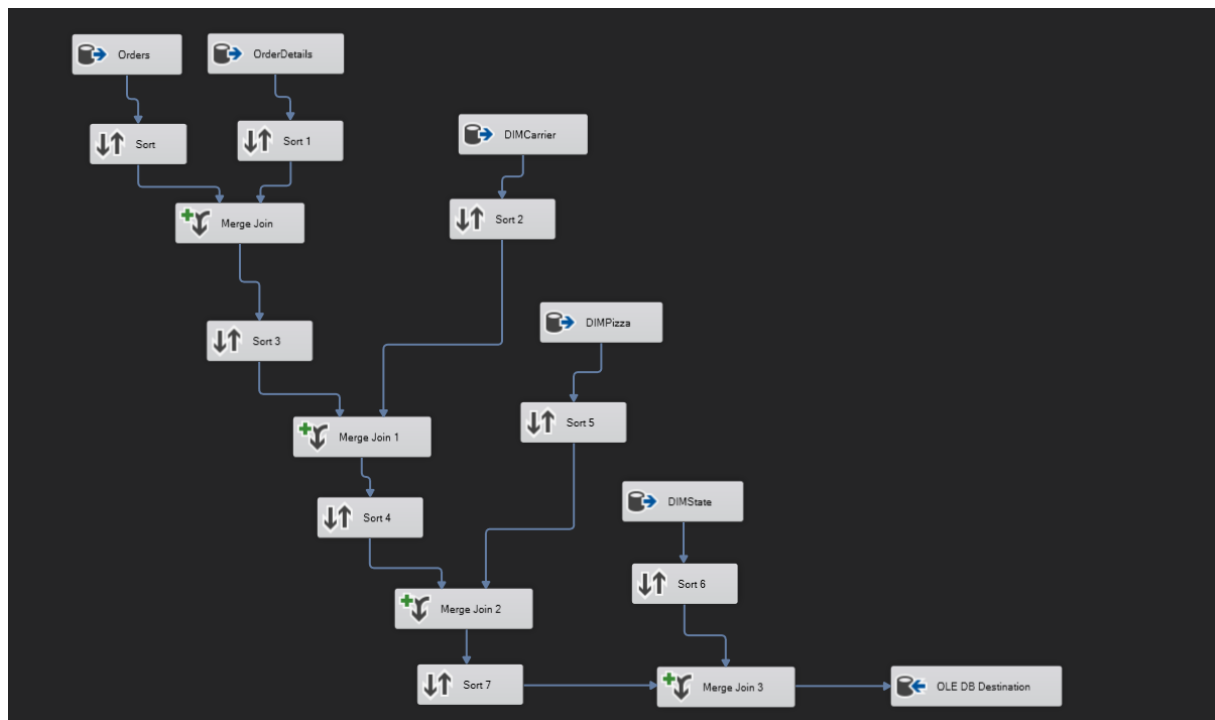
Messages    Execution plan

Query 1: Query cost (relative to the batch): 100%
****** Script for SelectTopNRows command from SSMS ******/ SELECT

SELECT        Top          Clustered Index Scan (ViewCl…
st: 0 %      Cost: 1 %     [FactsSalesCarrier].[idx_clu…
                                  Cost: 99 %
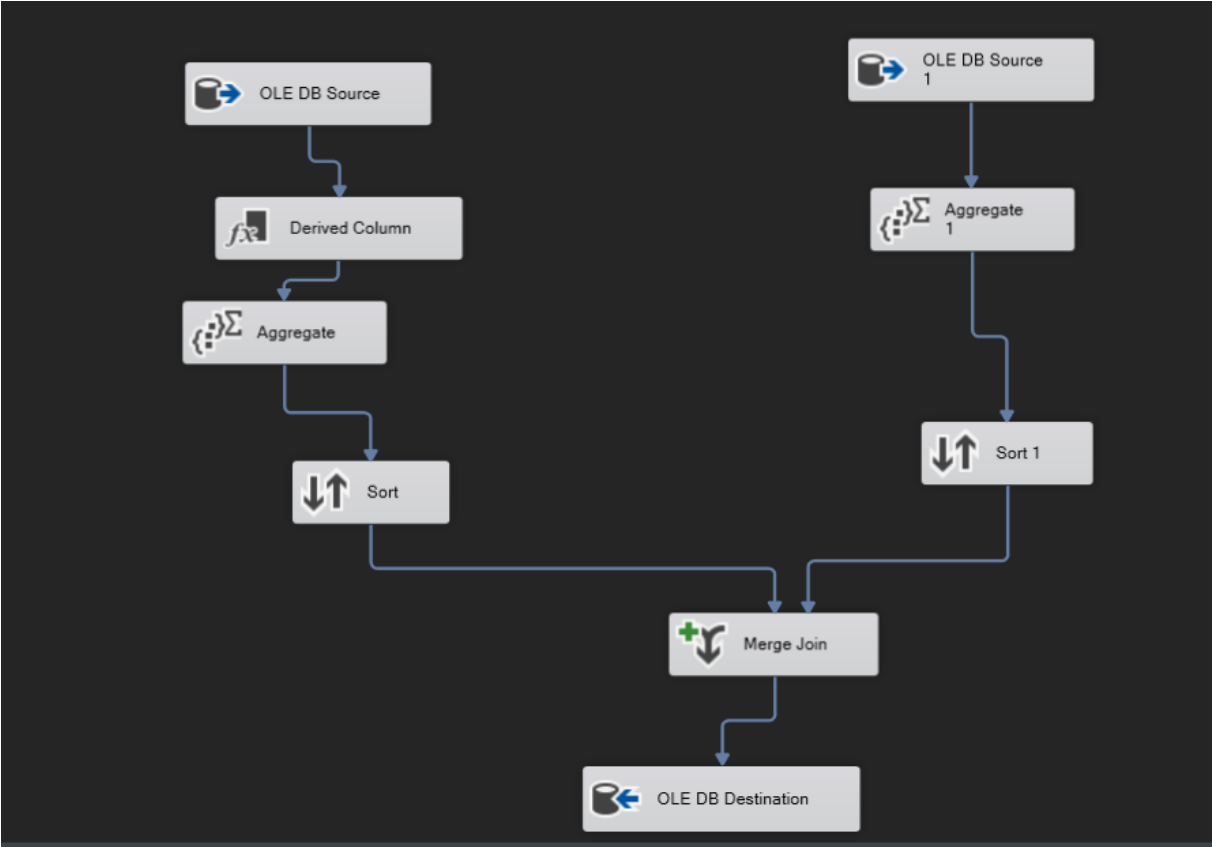
**Zadanie 5**

```
USE [cwiczenia5]
GO

/****** Object:  Table [dbo].[new_table]    Script Date: 09.11.2022
21:46:13 ******/
IF  EXISTS (SELECT * FROM sys.objects WHERE object_id =
OBJECT_ID(N'[dbo].[new_table]') AND type in (N'U'))
DROP TABLE [dbo].[new_table]
GO

select *, CONVERT(float, price) as price_num
 INTO new_table FROM FactSalesToAgg
```
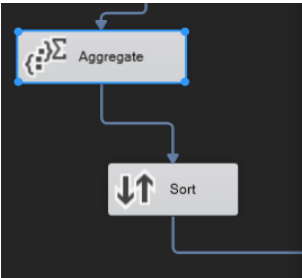
| Derived Column Name | Derived Column | Expression | Data Type | Le |
|---|---|---|---|---|
| amount_per_order | <add as new column> | price_num * quantity | double-precision flo... | |



| Input Column | Output Alias | Operation | Compa |
|---|---|---|---|
| amount_per_order | amount_of_all_orders | Sum | |
| date | date | Group by | |



| Input Column | Output Alias | Operation | Con |
|---|---|---|---|
| date | date | Group by | |
| carrier_key | carrier_key | Group by | |
| pizza_key | pizza_key | Group by | |
| state | state | Group by | |
| pizza_key | amount_sold | Count | |
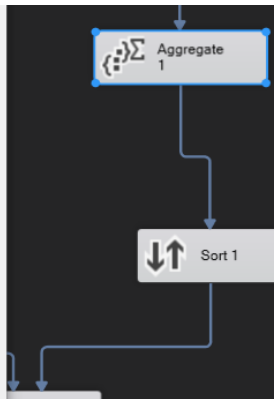
```
/****** Script for SelectTopNRows command from SSMS ******/
SELECT TOP (1000) [date]
      ,[carrier_key]
      ,[pizza_key]
      ,[state]
      ,[amount_sold]
      ,[amount_of_all_orders]
  FROM [cwiczenia5].[dbo].[DailySales]
```

99 %

Results | Messages

| | date | carrier_key | pizza_key | state | amount_sold | amount_of_all_orders |
|---|---|---|---|---|---|---|
| 1 | 2015-01-01 | 3 | 50 | Montana | 2 | 8133,04 |
| 2 | 2015-01-01 | 4 | 1 | British Columbia | 3 | 8133,04 |
| 3 | 2015-01-01 | 4 | 87 | Ohio | 3 | 8133,04 |
| 4 | 2015-01-01 | 2 | 6 | South Dakota | 3 | 8133,04 |
| 5 | 2015-01-01 | 3 | 54 | Montana | 2 | 8133,04 |
| 6 | 2015-01-01 | 4 | 3 | British Columbia | 3 | 8133,04 |
| 7 | 2015-01-01 | 2 | 12 | Ohio | 3 | 8133,04 |