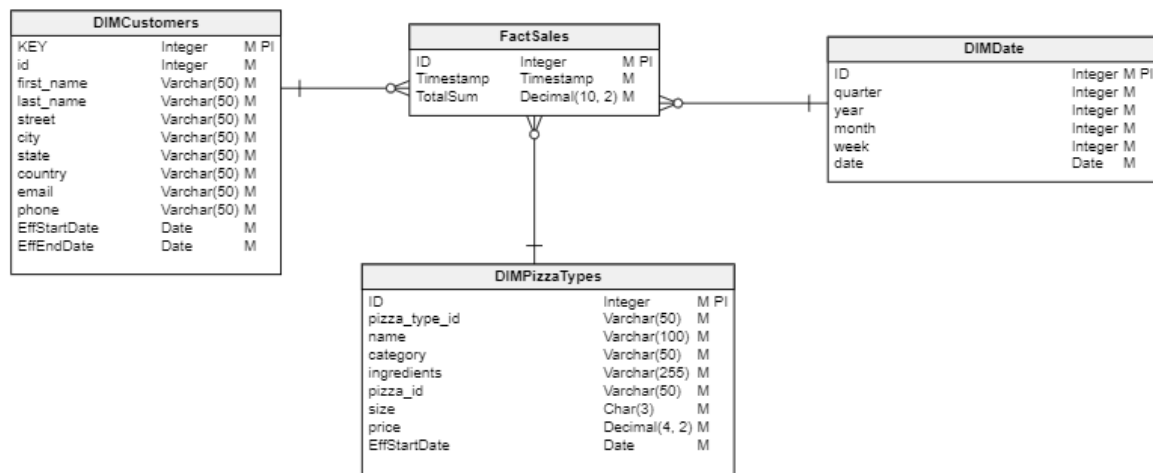


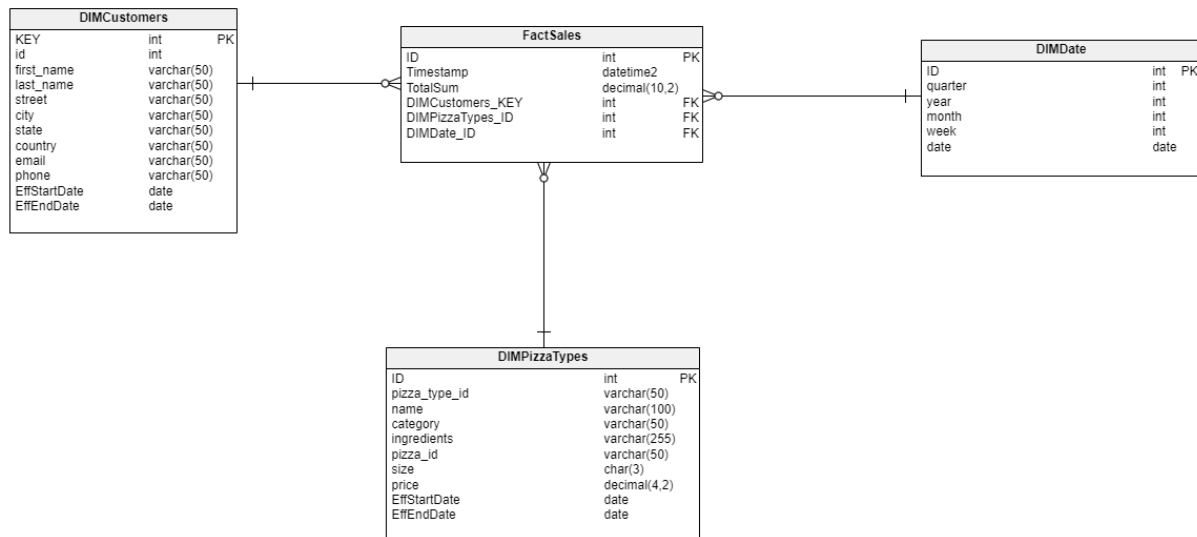
# LAB4

## ZADANIE 1

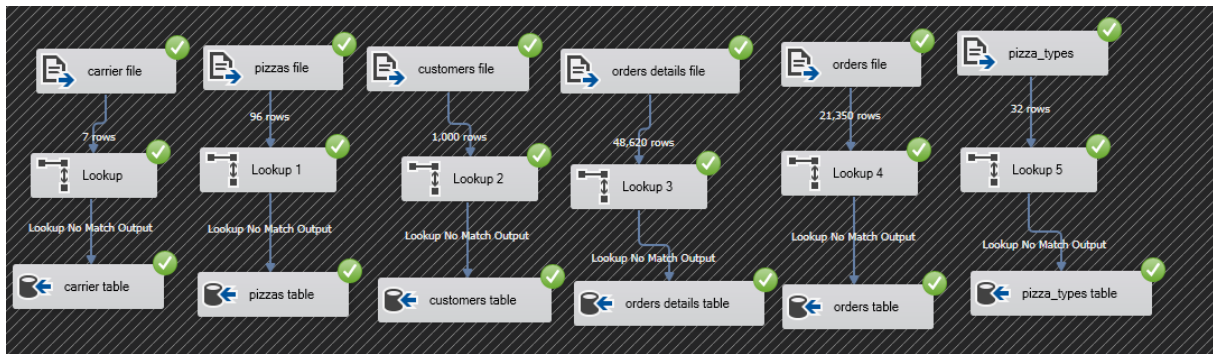
### LOGICZNY



### FIZYCZNY



## ZADANIE 2



### ZADANIE 3

**Object Explorer**

Connect: (SQL Server 15.0.2095.3 - LAPTOP-J7HC0HAD\Home)

- Databases
  - System Databases
  - Database Snapshots
  - AdventureWorks2019
  - cwiczenia1
  - cwiczenia3
  - cwiczenia4\_prod
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - External Tables
      - Graph Tables
      - dbo.DIMCustomers

**SQLQuery8.sql - (...HC0HAD\Home (59))\***

```

1
2 CREATE TABLE [dbo].[DIMCustomers](
3     id_num int IDENTITY(1,1),
4     [id] [varchar](50) NULL,
5     [first_name] [varchar](50) NULL,
6     [last_name] [varchar](50) NULL,
7     [street] [varchar](50) NULL,
8     [city] [varchar](50) NULL,
9     [state] [varchar](50) NULL,
10    [country] [varchar](50) NULL,
11    [phone] [varchar](50) NULL,
12    [email] [varchar](50) NULL,
13    eff_start_date [date] NULL,
14    eff_end_date [date] NULL,
15 )
16
17

```

**Slowly Changing Dimension Wizard**

**Select a Dimension Table and Keys**  
Select a dimension table to load and map columns in the transformation input to c

Connection manager: LocalHost.cwiczenia4\_prod

Table or view: [dbo].[DIMCustomers]

Input Columns	Dimension Columns	Key Type
city	city	Not a key column
country	country	Not a key column
	eff_end_date	
	eff_start_date	
email	email	Not a key column
first_name	first_name	Not a key column
id	id	Business key
last_name	last_name	Not a key column
phone	phone	Not a key column
state	state	Not a key column
street	street	Not a key column

Select a change type for slowly changing dimension columns:

Dimension Columns	Change Type
city	Changing attribute
country	Changing attribute
email	Historical attribute
first_name	Changing attribute
last_name	Changing attribute
phone	Historical attribute
state	Changing attribute
street	Changing attribute

SQLQuery9.sql - (...HCOHAD\Home (56)) SQLQuery8.sql - (...HCOHAD\Home (59))\*

```

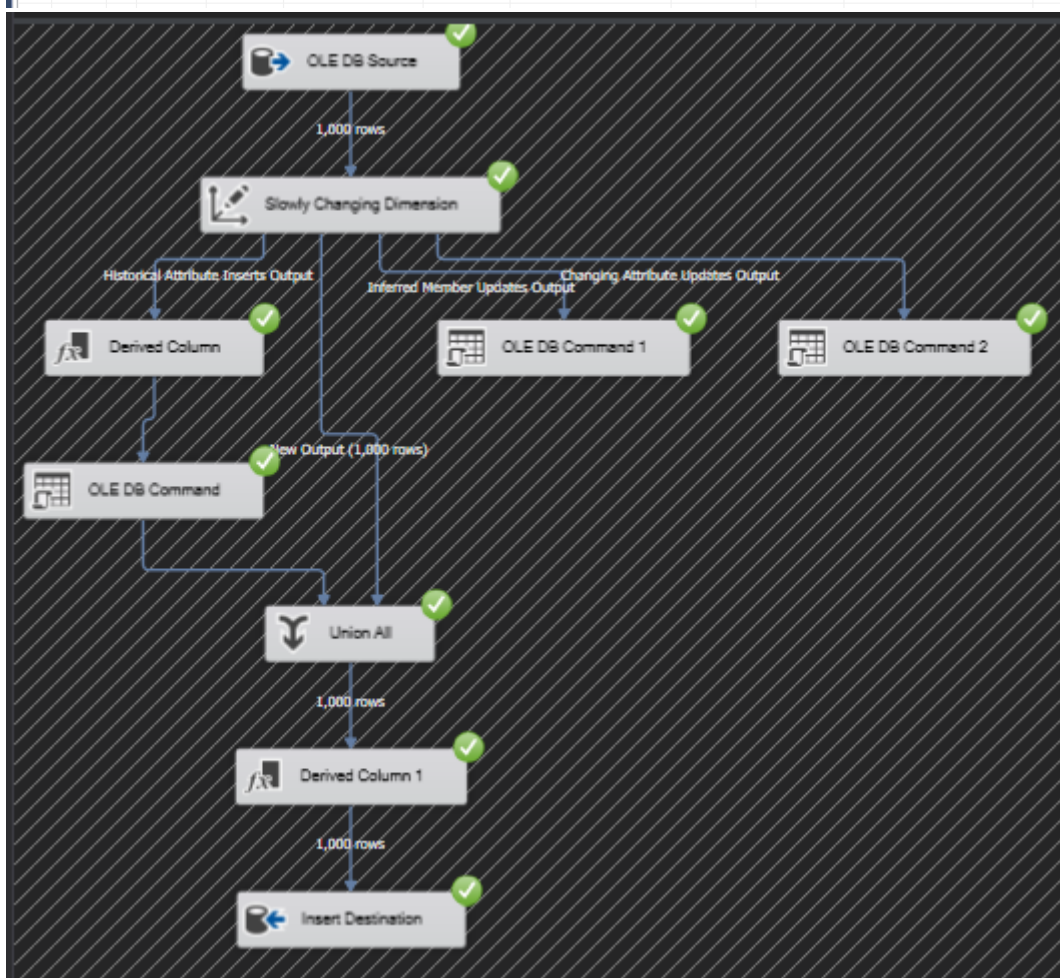
1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [id_num]
3     ,[id]
4     ,[first_name]
5     ,[last_name]
6     ,[street]
7     ,[city]
8     ,[state]
9     ,[country]
10    ,[phone]
11    ,[email]
12    ,[eff_start_date]
13    ,[eff_end_date]
14 FROM [cwiczenia4_prod].[dbo].[DIMCustomers]

```

100 %

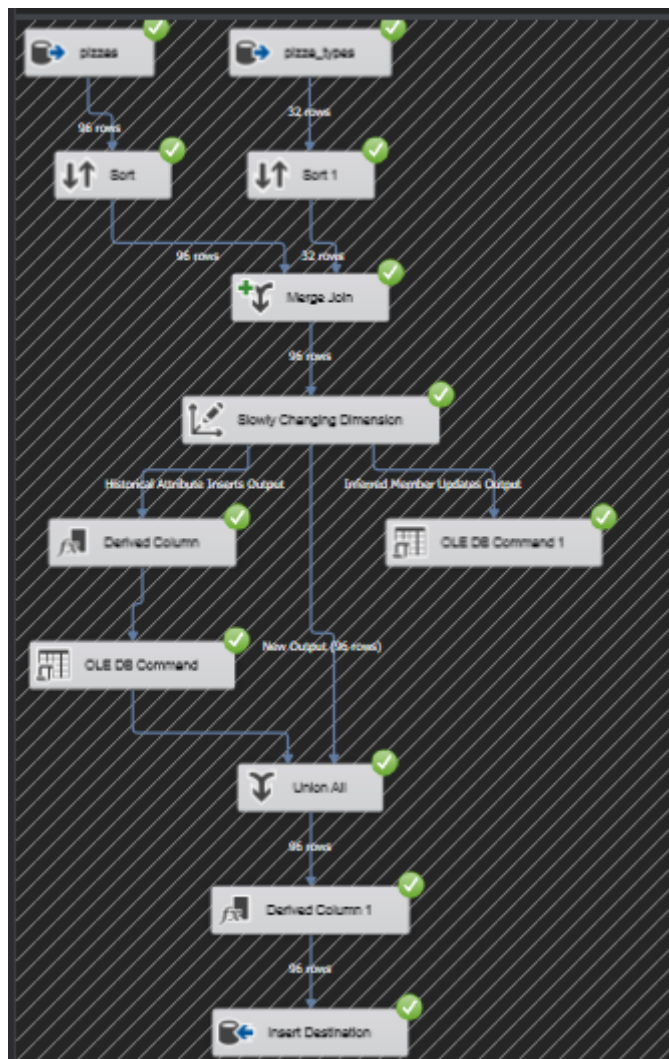
Results Messages

	id_num	id	first_name	last_name	street	city	state	country	phone	email	eff_start_date	eff_end_date
1	1	1	Anatol	Gronou	87931 Tony Court	New York City	Kansas	United States	211-695-5506	agronou0@emp.com	2022-11-01	NULL
2	2	2	William	Thredder	4607 Moulton Street	Kansas City	Missouri	United States	816-695-5506	wthredder1@usda.gov	2022-11-01	NULL
3	3	3	Raff	Lambrechts	4 Ryan Crossing	Washington	District of Columbia	United States	202-842-9482	rlambrechts2@dmoz.org	2022-11-01	NULL
4	4	4	Newton	Frankling	60 Monica Plaza	Clearwater	Florida	United States	305-799-1204	nfrankling3@theglobeandmail.com	2022-11-01	NULL
5	5	5	Bidget	Gulleyes	93 Victoria Plaza	Warren	Ohio	United States	330-901-5781	bgulleyes4@theatlantic.com	2022-11-01	NULL
6	6	6	Stan	Corwin	41 Arizona Plaza	New York City	New York	United States	646-390-8596	scorwin5@joomla.org	2022-11-01	NULL
7	7	7	Delmor	Greenwell	41384 Westport Park	Washington	District of Columbia	United States	202-177-2551	dgreenwell6@squarespace.com	2022-11-01	NULL
8	8	8	Roddie	Gelderd	799 Walton Park	Charlotte	North Carolina	United States	704-699-8941	rgelderd7@123-reg.co.uk	2022-11-01	NULL
9	9	9	Sharlene	Balden	6 Tennyson Place	Nashville	Tennessee	United States	615-840-7955	sbalden8@techcrunch.com	2022-11-01	NULL
10	10	10	Rutherford	Hurley	1 Ridgeway Road	Mesquite	Texas	United States	214-817-7731	rhurley9@hatena.ne.jp	2022-11-01	NULL
11	11	11	Gran	Strutt	688 Monument Trail	Boulder	Colorado	United States	303-548-6761	gstrutte@rambler.ru	2022-11-01	NULL
12	12	12	Shay	Clampe	7 Golf Course Crossing	Roanoke	Virginia	United States	540-504-8119	sclampeb@nba.com	2022-11-01	NULL
13	13	13	Nixie	Trevethan	7 American Ash Place	Los Angeles	California	United States	562-890-1528	ntrevethano@samsung.com	2022-11-01	NULL
14	14	14	Langsdon	Micklewicz	6 Florence Avenue	Spirit River	Alberta	Canada	395-674-9327	lmicklewiczd@odnoklassniki.ru	2022-11-01	NULL



## ZADANIE 4





ZADANIE 5

```

2 CREATE TABLE [dbo].[DIMDate]
3 (
4     [DateKey] INT NOT NULL PRIMARY KEY,
5     [Date] DATE NOT NULL,
6     [Day] TINYINT NOT NULL,
7     [Quarter] TINYINT NOT NULL,
8     [Year] INT NOT NULL,
9     [Month] CHAR(7) NOT NULL,
10    [Week] TINYINT NOT NULL,
11 )
12
13
14 DECLARE @StartDate DATE = '2015-01-01'
15 DECLARE @EndDate DATE = DATEADD(Day, -1, DATEADD(YEAR, 10, @StartDate));
16
17
18 WHILE @StartDate < @EndDate
19 BEGIN
20     INSERT INTO [dbo].[DIMDate] (
21         [DateKey],
22         [Date],
23         [Day],
24         [Quarter],
25         [Year],
26         [Month],
27         [Week]
28     )
29     SELECT [DateKey] = YEAR(@StartDate) * 10000 + MONTH(@StartDate) * 100 + DAY(@StartDate),
30         [Date] = @StartDate,
31         [Day] = DATEPART(day, @StartDate),
32         [Quarter] = DATEPART(Quarter, @StartDate),
33         [Year] = DATEPART(YEAR, @StartDate),
34         [Month] = DATEPART(MONTH, @StartDate),
35         [Week] = DATEPART(WEEK, @StartDate)
36
37
38     SET @StartDate = DATEADD(DD, 1, @StartDate)
39
40
41 END
42
43 select * from [dbo].[DIMDate]
44

```

100 %

Results Messages

	DateKey	Date	Day	Quarter	Year	Month	Week
1	20150101	2015-01-01	1	1	2015	1	1
2	20150102	2015-01-02	2	1	2015	1	1
3	20150103	2015-01-03	3	1	2015	1	1
4	20150104	2015-01-04	4	1	2015	1	2

ZADANIE 6

Object Explorer

Connect

. (SQL Server 15.0.2095.3 - LAPTOP-J7HC0HAD\Home)

Databases

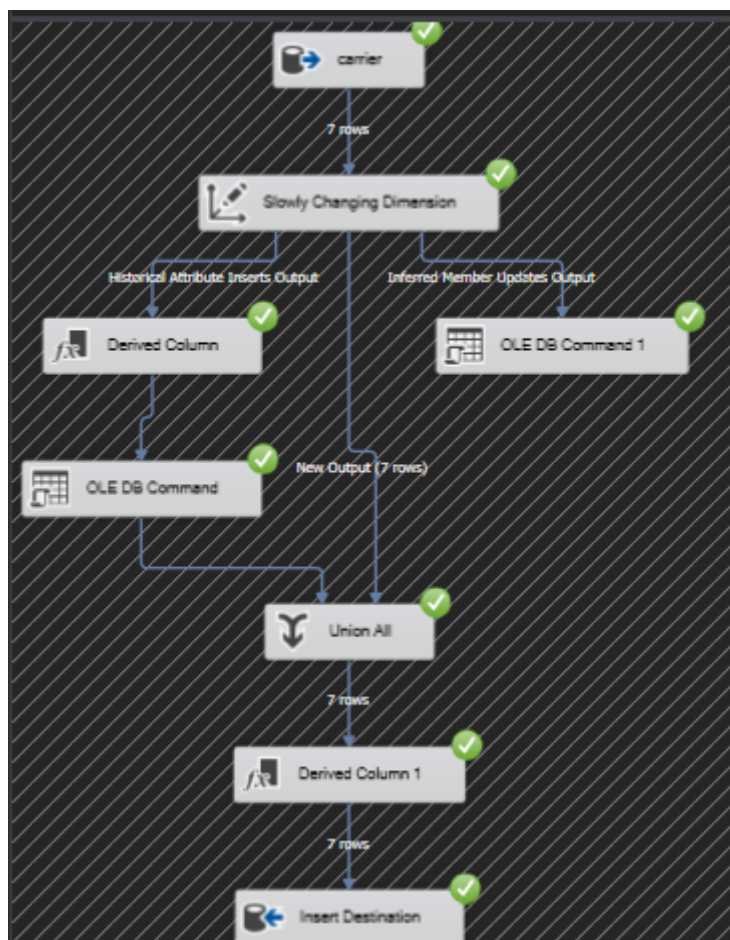
- System Databases
- Database Snapshots
- AdventureWorks2019
- cwiczenia1
- cwiczenia3
- cwiczenia4\_prod**
- Database Diagrams
- Tables
  - System Tables
  - FileTables
  - External Tables
  - Graph Tables
  - dbo.DIMCarrier
  - dbo.DIMCustomers
  - dbo.DIMPizzaTypes

SQLQuery21.sql - ...HC0HAD\Home (71))\*

```

1
2 CREATE TABLE [dbo].[DIMCarrier](
3     [key] [int] IDENTITY(1,1),
4     [carrier_id] [varchar](50) NULL,
5     [carrier_name] [varchar](50) NULL,
6     [address] [varchar](50) NULL,
7     [tax_id] [varchar](50) NULL,
8     [contact_person] [varchar](50) NULL,
9     [EffStartDate] [date] NULL,
10    [EffEndDate] [date] NULL
11 )
12
13
14
  
```

Dimension Columns	Change Type
address	Historical attribute
carrier_name	Historical attribute
contact_person	Historical attribute
tax_id	Historical attribute



```

update carrier
SET carrier_name = 'BOLT'
where carrier_id = '4'

```

```

2 SELECT [carrier_id]
3        ,[carrier_name]
4        ,[address]
5        ,[tax_id]
6        ,[contact_person]
7 FROM [cwiczenia4_prod].[dbo].[DIMCarrier]

```

100 %

Results Messages

	carrier_id	carrier_name	address	tax_id	contact_person
1	"1"	Bolt	""711 County Rd #44"		
2	"Marion	Alabama(AL)	36756""	80794	a.adams@bolt.com"
3	"2"	Uber	""124 Elizabethton Way"		
4	"Clinton	Tennessee(TN)	37716""	516387	b.bonsohn@uber.com"
5	"3"	Volt	""29741 Little Bear Dr"		
6	"Danbury	Wisconsin(WI)	54830""	162056	c.callente@volt.com"
7	4	Own	n/a	563452	n/a
8	4	BOLT	n/a	563452	n/a