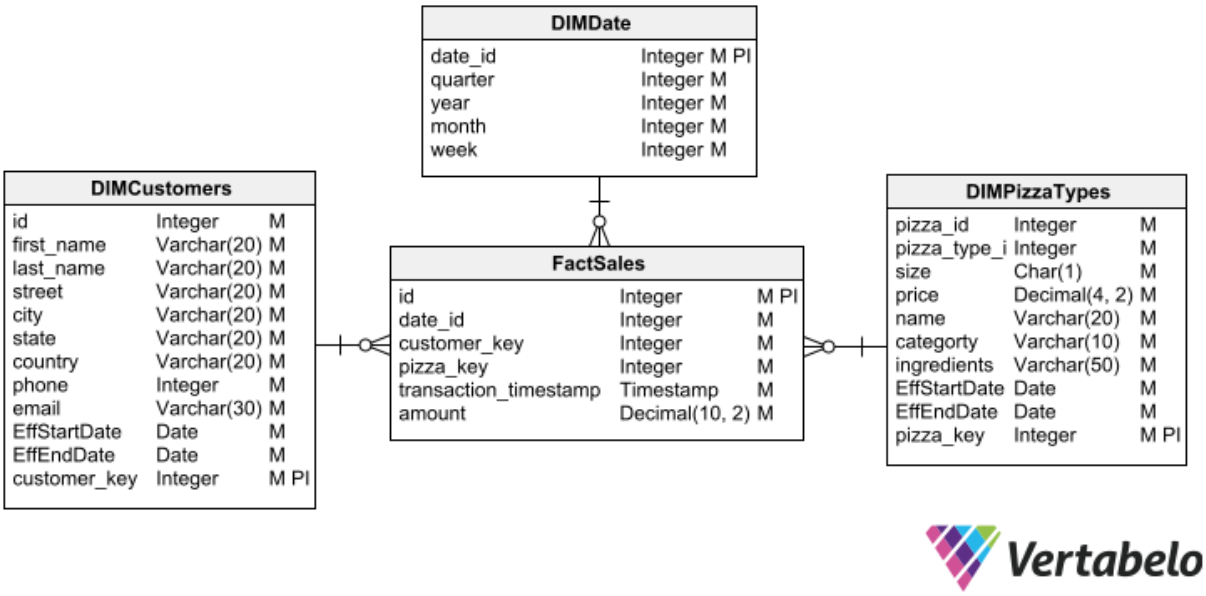
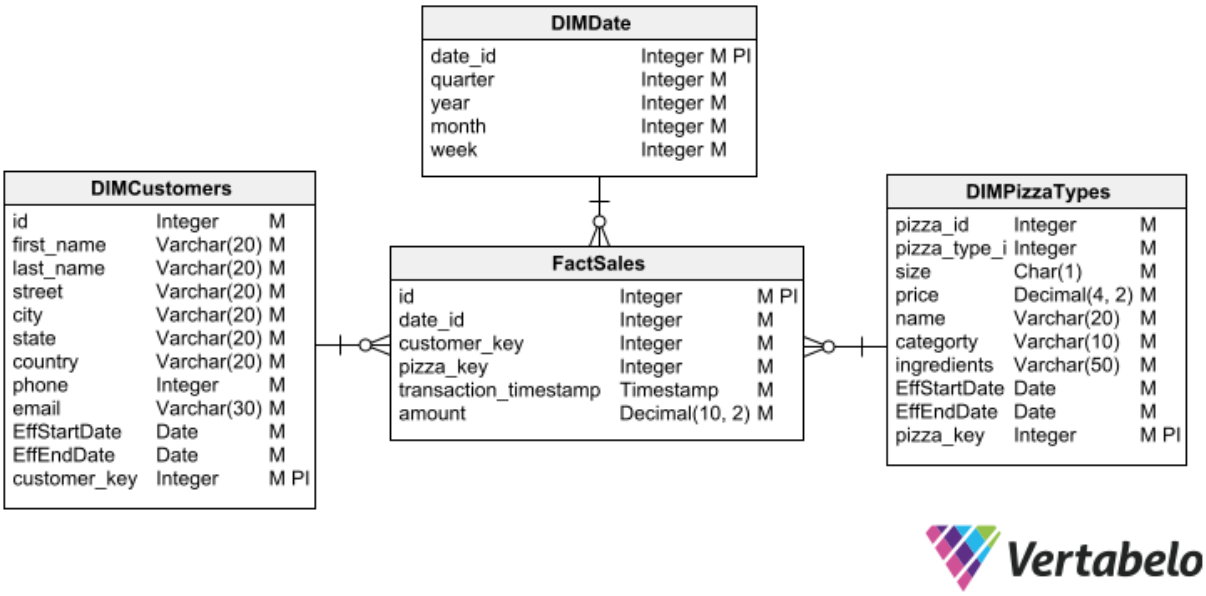
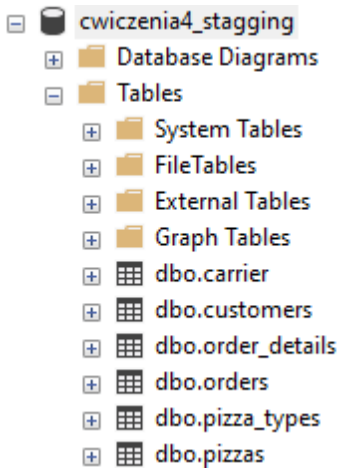
Krzysztof Żarnowski, 296213

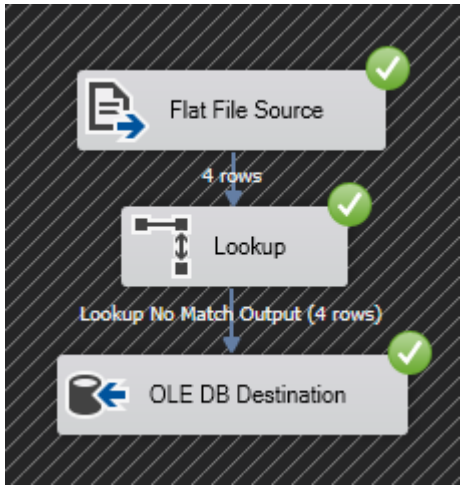
Zad 1

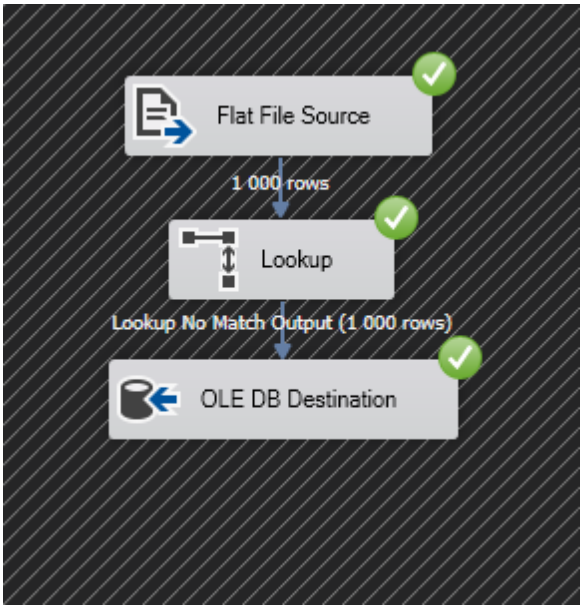


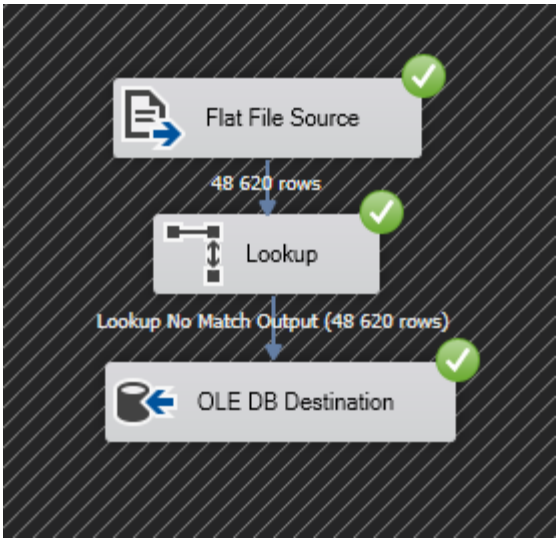


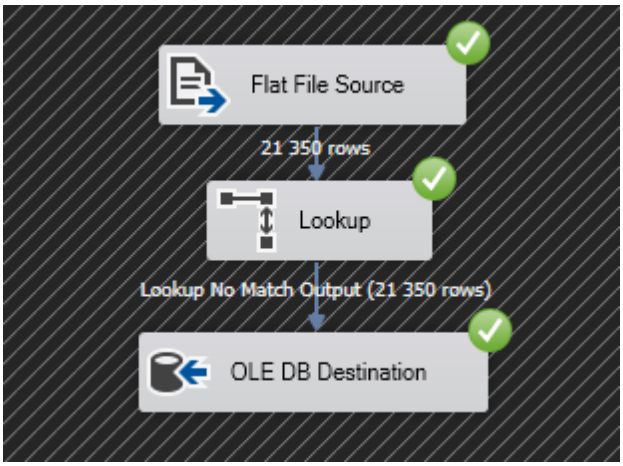
Zad 2

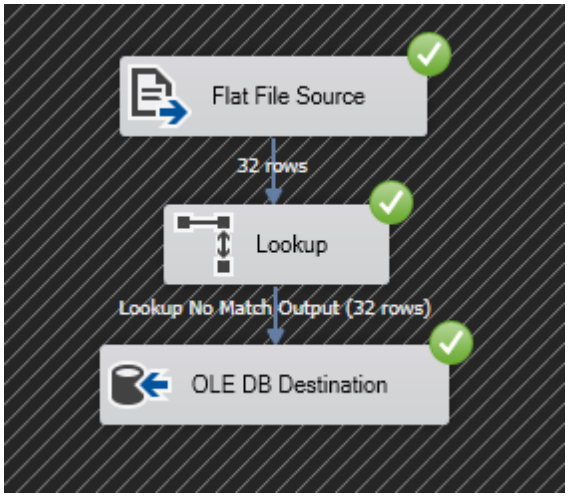

cwiczenia4_stagging
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.carrier
dbo.customers
dbo.order_details
dbo.orders
dbo.pizza_types
dbo.pizzas

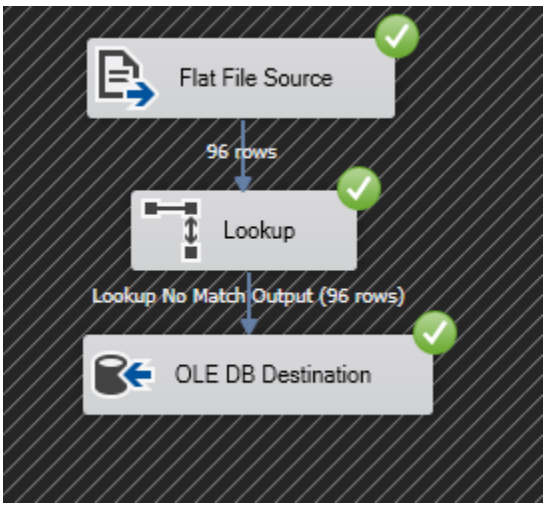

Flat File Source
4 rows
Lookup
Lookup No Match Output (4 rows)
OLE DB Destination


Flat File Source
1 000 rows
Lookup
Lookup No Match Output (1 000 rows)
OLE DB Destination


Flat File Source
48 620 rows
Lookup
Lookup No Match Output (48 620 rows)
OLE DB Destination

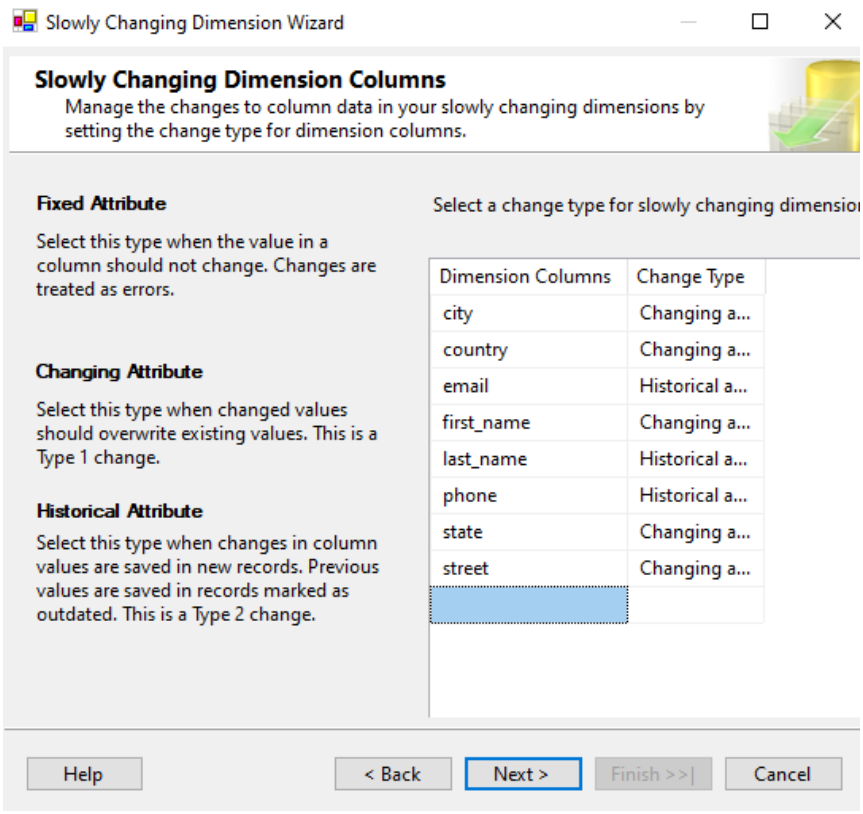

Flat File Source
21 350 rows
Lookup
Lookup No Match Output (21 350 rows)
OLE DB Destination

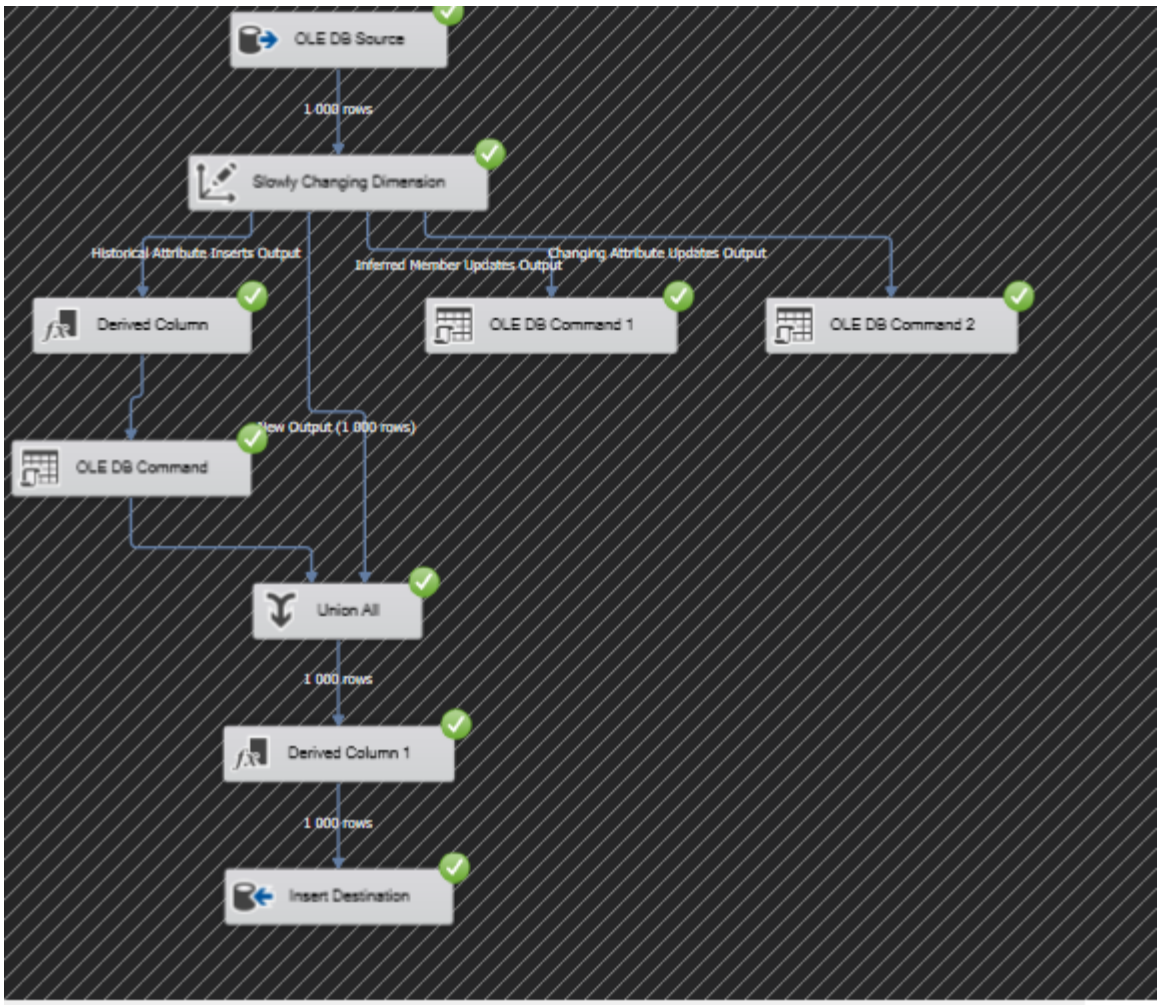

Flat File Source
32 rows
Lookup
Lookup No Match Output (32 rows)
OLE DB Destination



Zad 3

```
CREATE TABLE [dbo].[DIMCustomers](
    [key] [int] IDENTITY(1,1),
    [id] [int] NULL,
    [first_name] [varchar](50) NULL,
    [last_name] [varchar](50) NULL,
    [street] [varchar](50) NULL,
    [city] [varchar](50) NULL,
    [state] [varchar](50) NULL,
    [country] [varchar](50) NULL,
    [phone] [varchar](12) NULL,
    [email] [varchar](50) NULL,
    [EffStartDate] [date] NULL,
    [EffEndDate] [date] NULL
) ON [PRIMARY]
GO
```





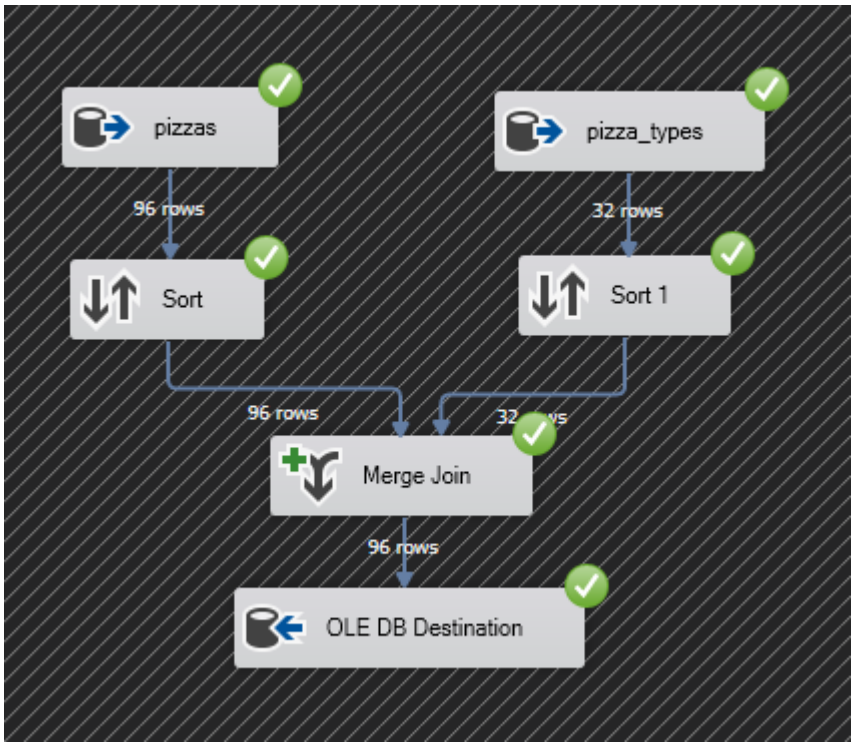

```
select * from dbo.DIMCustomers
```

Results | Messages

	key	id	first_name	last_name	street	city	state	country	phone	email	EffStartDate	EffEndDate
1	1	1	Anatol	Gronou	87931 Tony Court	New York City	Kansas	United States	211-695-5506	agronou0@emp.com	2022-10-31	NULL
2	2	2	William	Thredder	4607 Moulton Street	Kansas City	Missouri	United States	816-695-5506	wthredder1@usda.gov	2022-10-31	NULL
3	3	3	Raff	Lambrechts	4 Ryan Crossing	Washington	District of Columbia	United States	202-842-9482	rlambrechts2@dmoz.org	2022-10-31	NULL
4	4	4	Newton	Frankling	60 Monica Plaza	Clearwater	Florida	United States	305-799-1204	nfrankling3@theglobeandmail.com	2022-10-31	NULL
5	5	5	Bidget	Gullyes	93 Victoria Plaza	Warren	Ohio	United States	330-901-5781	bgullyes4@theatlantic.com	2022-10-31	NULL
6	6	6	Stan	Corwin	41 Arizona Plaza	New York City	New York	United States	646-390-8596	scorwin5@joomla.org	2022-10-31	NULL
7	7	7	Delmor	Greenwell	41384 Westport Park	Washington	District of Columbia	United States	202-177-2551	dgreenwell6@squarespace.com	2022-10-31	NULL
8	8	8	Roddie	Gelderd	799 Walton Park	Charlotte	North Carolina	United States	704-699-8941	rgelderd7@123-reg.co.uk	2022-10-31	NULL
9	9	9	Sharlene	Balden	6 Tennyson Place	Nashville	Tennessee	United States	615-840-7955	sbalden8@techcrunch.com	2022-10-31	NULL
10	10	10	Rutherford	Hurley	1 Ridgeway Road	Mesquite	Texas	United States	214-817-7731	rhurley9@hatena.ne.jp	2022-10-31	NULL
11	11	11	Gran	Strutt	688 Monument Trail	Boulder	Colorado	United States	303-548-6761	gstrutta@rambler.ru	2022-10-31	NULL
12	12	12	Shay	Clampe	7 Golf Course Crossing	Roanoke	Virginia	United States	540-504-8119	sclampeb@nba.com	2022-10-31	NULL
13	13	13	Nixie	Trevethan	7 American Ash Place	Los Angeles	California	United States	562-890-1528	ntrevethanc@samsung.com	2022-10-31	NULL
14	14	14	Langsdon	Micklewicz	6 Florence Avenue	Spirit River	Alberta	Canada	395-674-9327	lmicklewiczd@odnoklassniki.ru	2022-10-31	NULL

Zad 4

```
CREATE TABLE [dbo].[DIMPizzaTypes](
    [key] [int] IDENTITY(1,1),
    [pizza_type_id] [varchar](50) NULL,
    [name] [varchar](50) NULL,
    [category] [varchar](50) NULL,
    [ingredients] [varchar](250) NULL,
    [pizza_id] [varchar](50) NULL,
    [size] [varchar](50) NULL,
    [price] [varchar](50) NULL,
    [EffStartDate] [date] NULL,
    [EffEndDate] [date] NULL
) ON [PRIMARY]
GO
```



Slowly Changing Dimension Wizard

Slowly Changing Dimension Columns

Manage the changes to column data in your slowly changing dimensions by setting the change type for dimension columns.

Fixed Attribute

Select this type when the value in a column should not change. Changes are treated as errors.

Changing Attribute

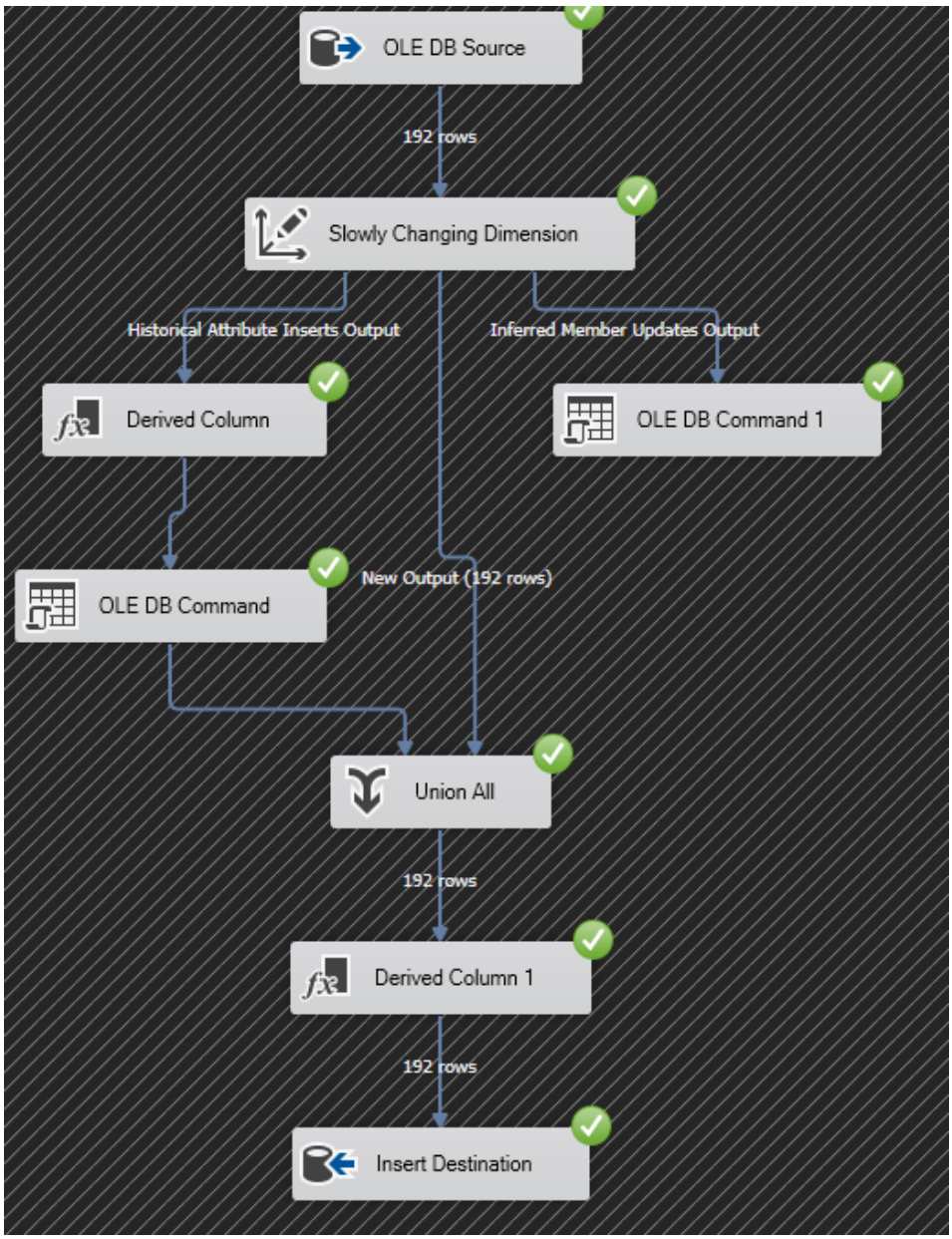
Select this type when changed values should overwrite existing values. This is a Type 1 change.

Historical Attribute

Select this type when changes in column values are saved in new records. Previous values are saved in records marked as outdated. This is a Type 2 change.

Select a change type for slowly changing dimension columns:

Dimension Columns	Change Type
category	Historical a...
ingredients	Historical a...
name	Historical a...
pizza_id	Historical a...
price	Historical a...
size	Historical a...




```
select * from dbo.DIMPizzaTypes
```

Results | Messages

	key	pizza_type_id	name	category	ingredients	pizza_id	size	price	EffStartDate	EffEndDate
1	1	bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, To...	bbq_ckn_s	S	12.75	2022-10-31	NULL
2	2	bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, To...	bbq_ckn_m	M	16.75	2022-10-31	NULL
3	3	bbq_ckn	The Barbecue Chicken Pizza	Chicken	Barbecued Chicken, Red Peppers, Green Peppers, To...	bbq_ckn_l	L	20.75	2022-10-31	NULL
4	4	big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage	big_meat_l	L	20.5	2022-10-31	NULL
5	5	big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage	big_meat_m	M	16	2022-10-31	NULL
6	6	big_meat	The Big Meat Pizza	Classic	Bacon, Pepperoni, Italian Sausage, Chorizo Sausage	big_meat_s	S	12	2022-10-31	NULL
7	7	brie_carre	The Brie Carre Pizza	Supreme	Brie Carre Cheese, Prosciutto, Caramelized Onions, Pe...	brie_carre_s	S	23.65	2022-10-31	NULL
8	8	calabrese	The Calabrese Pizza	Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions, Frigg...	calabrese_m	M	16.25	2022-10-31	NULL
9	9	calabrese	The Calabrese Pizza	Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions, Frigg...	calabrese_s	S	12.25	2022-10-31	NULL
10	10	calabrese	The Calabrese Pizza	Supreme	'Nduja Salami, Pancetta, Tomatoes, Red Onions, Frigg...	calabrese_l	L	20.25	2022-10-31	NULL
11	11	cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Pepper...	cali_ckn_l	L	20.75	2022-10-31	NULL
12	12	cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Pepper...	cali_ckn_s	S	12.75	2022-10-31	NULL
13	13	cali_ckn	The California Chicken Pizza	Chicken	Chicken, Artichoke, Spinach, Garlic, Jalapeno Pepper...	cali_ckn_m	M	16.75	2022-10-31	NULL
14	14	ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asia...	ckn_alfredo_s	S	12.75	2022-10-31	NULL
15	15	ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asia...	ckn_alfredo_m	M	16.75	2022-10-31	NULL
16	16	ckn_alfredo	The Chicken Alfredo Pizza	Chicken	Chicken, Red Onions, Red Peppers, Mushrooms, Asia...	ckn_alfredo_l	L	20.75	2022-10-31	NULL
17	17	ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pe...	ckn_pesto_m	M	16.75	2022-10-31	NULL
18	18	ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pe...	ckn_pesto_s	S	12.75	2022-10-31	NULL
19	19	ckn_pesto	The Chicken Pesto Pizza	Chicken	Chicken, Tomatoes, Red Peppers, Spinach, Garlic, Pe...	ckn_pesto_l	L	20.75	2022-10-31	NULL

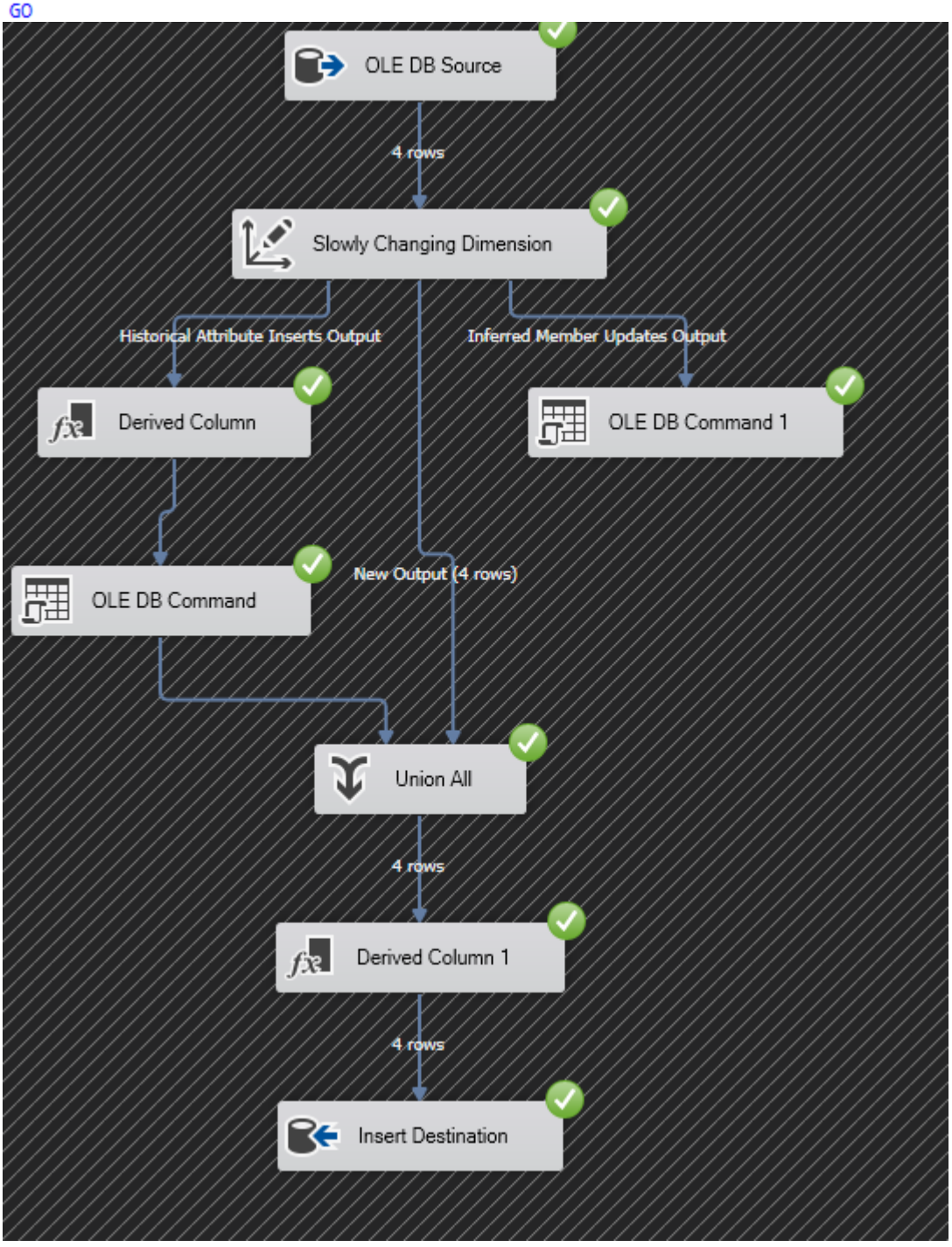
Zad 5

```
create table  [dbo].[DIMDate] (
    [key] int NOT NULL,
    [date] date NOT NULL,
    [day] int NOT NULL,
    [week] int NOT NULL,
    [month] int NOT NULL,
    [quarter] int NOT NULL,
    [year] int NOT NULL
);

declare @CurrentDate date = '2015-01-01'
declare @EndDate date = dateadd(day, -1, dateadd(year, 10, @CurrentDate));

while @CurrentDate < @EndDate
begin
    insert into [dbo].[DIMDate] (
        [key],
        [date],
        [day],
        [week],
        [month],
        [quarter],
        [year]
    )
    select [key] = year(@CurrentDate) * 1000 + month(@CurrentDate) * 100 + day(@CurrentDate),
           [date] = @CurrentDate,
           [day] = day(@CurrentDate),
           [week] = datepart(wk, @CurrentDate),
           [month] = month(@CurrentDate),
           [quarter] = datepart(q, @CurrentDate),
           [year] = year(@CurrentDate)


    set @CurrentDate = dateadd(DD, 1, @CurrentDate)
end

select * from [dbo].[DIMDate]
```

90 %

Results | Messages

	key	date	day	week	month	quarter	year
1	2015101	2015-01-01	1	1	1	1	2015
2	2015102	2015-01-02	2	1	1	1	2015
3	2015103	2015-01-03	3	1	1	1	2015
4	2015104	2015-01-04	4	2	1	1	2015
5	2015105	2015-01-05	5	2	1	1	2015
6	2015106	2015-01-06	6	2	1	1	2015
7	2015107	2015-01-07	7	2	1	1	2015
8	2015108	2015-01-08	8	2	1	1	2015
9	2015109	2015-01-09	9	2	1	1	2015
10	2015110	2015-01-10	10	2	1	1	2015
11	2015111	2015-01-11	11	3	1	1	2015
12	2015112	2015-01-12	12	3	1	1	2015

Zad 6

```
CREATE TABLE [dbo].[DIMCarrier](
    [key] [int] IDENTITY(1,1),
    [carrier_id] [int] NULL,
    [carrier_name] [varchar](4) NULL,
    [address] [varchar](50) NULL,
    [tax_id] [int] NULL,
    [contact_person] [varchar](19) NULL,
    [EffStartDate] [date] NULL,
    [EffEndDate] [date] NULL
) ON [PRIMARY]
GO
```