

# Global Superstore



The growth of supermarkets in most populated cities are increasing and market competitions are also high. The dataset is one of the historical sales of supermarket company which has recorded in many different branches for months data. Predictive data analytics methods are easy to apply with this dataset.

A random sample was selected from the data between 2012 and 2015. The data reflects supermarket data in several countries around the world.

## The main columns in the dataset file are:

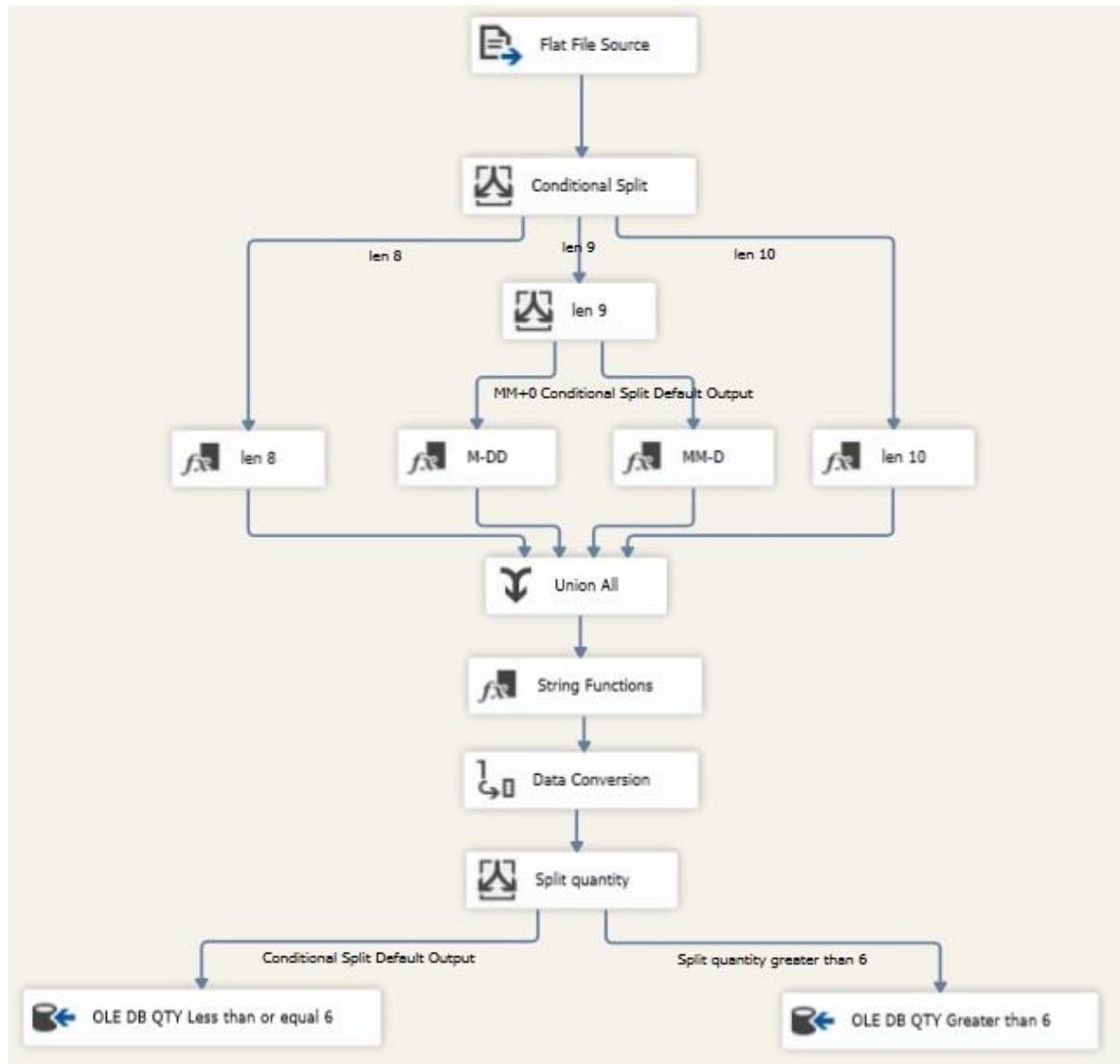
- Row ID
- Order ID
- Order Date
- Ship Date
- Ship Mode
- Customer ID
- Customer Name
- Segment
- Postal Code
- City
- State
- Country
- Region
- Market
- Product ID
- Category
- Sub-Category
- Product Name
- Sales Quantity
- Discount
- Profit
- Shipping Cost
- Order Priority

## A screenshot from Dataset:

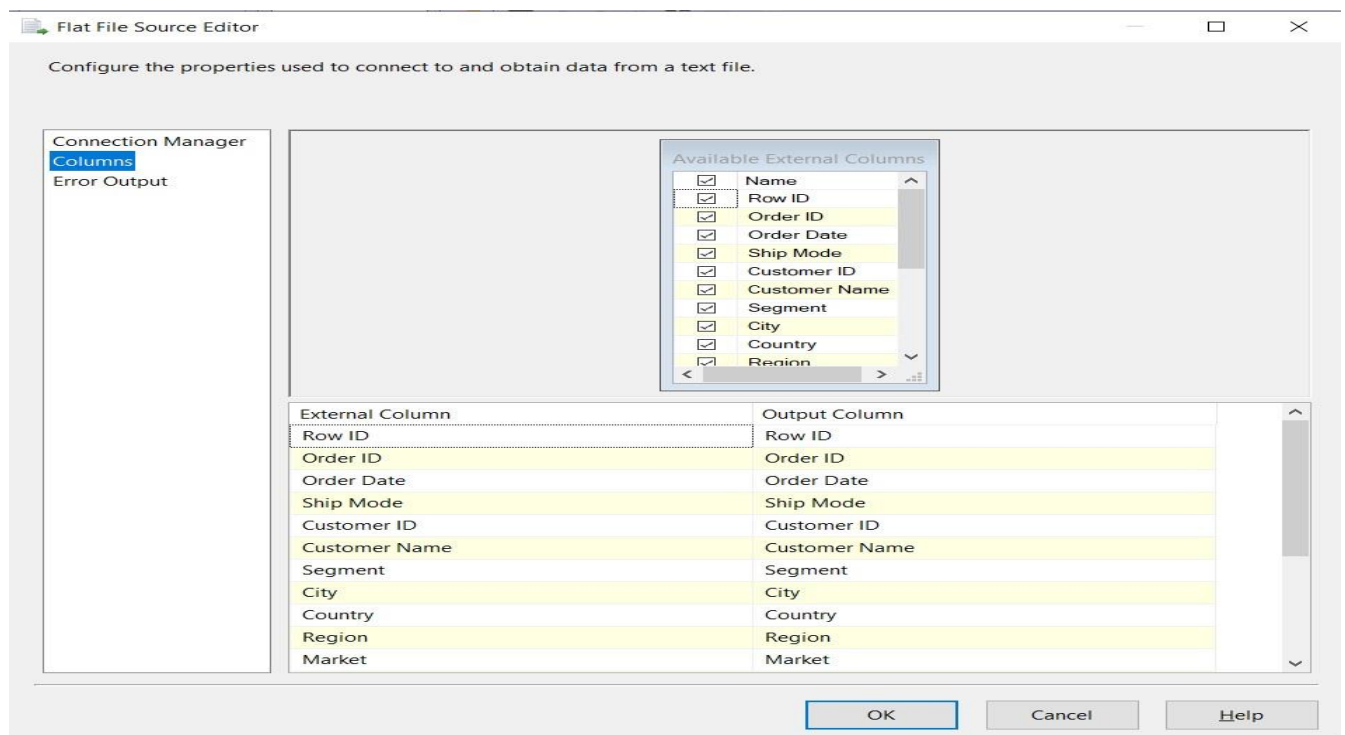
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Postal Code	City	State	Country	Region	Market	Product ID	Category	Sub-Category	Product Name	Sales Quantity	Discount	Profit	Shipping Cost	Order Priority	Order Status
40308	CA-2014-461007640-4195	1/11/2014	1/13/2014	First Class	AB-10015402	Aaron Bergman	Consumer	73120	Oklahoma City	Oklahoma	United States	CentralUS	USCA	TEC-PH	Technical Phones	Samsumg	422138	2	0	852.15	40.77	High	
26341	IN-2014-PR02101-4195	1/11/2014	3/12/2012	Second Class	AB-1001201	Jason Peter	Corporate		Volongong	New South Wales	Australia	Oceania	Asia Pacific	FUR-CH	Furniture Chairs	Novente	*****	5	0	1*****	333.83	Critical	
25330	IN-2014-CR127301-4193	10/17/2014	10/18/2014	First Class	CR-127301	Craig Reter	Consumer		Brisbane	Queensland	Australia	Oceania	Asia Pacific	TEC-PH	Technical Phones	Nokia Se	*****	5	0	14919.57	35.45	Medium	
15254	ES-2014-KM1637940-4196	1/26/2014	1/30/2014	First Class	KM-1637940	Katherine Murray	Home Office		Belin	Germany	Germany	Western Europe	Europe	TEC-PH	Technical Phones	Motorola	*****	5	0	1495.54	30.16	Medium	
41221	SD-2014-PH1435101-4294	1/15/2014	1/16/2014	Same Day	PH-1435101	Rich Hansen	Consumer		Dakar	Senegal	Senegal	Western Africa	Africa	TEC-CO	Technical Copiers	Sharp M	*****	6	0	121152	303.24	Critical	
22732	IN-2014-KM155551-4198	6/23/2014	7/12/2014	Second Class	KM-155551	Jim Michum	Corporate		Sydney	New South Wales	Australia	Oceania	Asia Pacific	TEC-PH	Technical Phones	Samsumg	*****	5	0	14763.28	897.35	Critical	
30570	IN-2012-TSC104050-4129	1/16/2012	1/16/2012	First Class	TS-2104982	Toby Swindell	Consumer		Valington	New Zealand	New Zealand	Oceania	Asia Pacific	FUR-CH	Furniture Chairs	Novente	*****	4	0	8564.04	894.77	Critical	
31152	IN-2014-MB160552-4178	4/14/2013	4/16/2013	Standard Class	MB-160552	Nick Brown	Consumer		Hamilton	Victoria	New Zealand	Oceania	Asia Pacific	FUR-CH	Furniture Tables	Chromer	*****	6	0	8395.48	878.38	High	
4009	CA-2014-461007640-4195	1/11/2014	1/13/2014	First Class	AB-10015402	Aaron Bergman	Consumer	73120	Oklahoma City	Oklahoma	United States	CentralUS	USCA	FUR-BO	Furniture Bookcases	Sauder F	134136	2	0	154.71	25.27	High	
36258	CA-2012-461007640-4091	3/16/2012	3/17/2012	First Class	AB-10015404	Aaron Bergman	Consumer	38013	Seattle	Washington	United States	WesternUS	USCA	FUR-CH	Furniture Chairs	Global P	148.71	1	0.2	15.48	11.13	High	
36259	CA-2012-461007640-4091	3/16/2012	3/17/2012	First Class	AB-10015404	Aaron Bergman	Consumer	38013	Seattle	Washington	United States	WesternUS	USCA	OFF-AD	Office St. An	Novell S	177.34	3	0	14.66	4.29	High	
28873	IN-2013-AJ107801-4193	4/13/2013	4/22/2013	First Class	AJ-107801	Anthony Jacobs	Corporate		Kabul	Kabul	Alghanistan	Southern Asia	Asia Pacific	FUR-CH	Furniture Chairs	Bevi Co	*****	5	0	8547.55	335.57	High	
45794	SA-2012-MM126910-4129	12/26/2012	12/28/2012	Second Class	MM-126910	Magdelene Morse	Consumer		Jazan	Saudi Arabia	Saudi Arabia	Western Asia	Asia Pacific	TEC-PH	Technical Phones	Cisco Se	*****	4	0	*****	332.41	Critical	
4132	MX-2010-VF171819-1531	1/13/2013	1/13/2013	Same Day	VF-171819	Vicky Fernman	Home Office		Toluca	Panama	Panama	South America	LATAM	FUR-CH	Furniture Chairs	Habour I	*****	7	0	8622.02	188.25	Critical	
27704	IN-2014-PF151027-41796	6/6/2014	6/8/2014	Second Class	PF-151027	Peter Fuller	Consumer		Mudangling	Hongkongling	China	Eastern Asia	Asia Pacific	OFF-AP	Office St. Applano	Kichend	*****	12	0	*****	804.54	Critical	
17175	ES-2015-EP118545-4218	1/31/2015	1/31/2015	Second Class	EP-118545	Ben Piesman	Corporate		Paris	France	France	Western Europe	Europe	OFF-AP	Office St. Applano	Bouffle F	*****	4	0	1188.95	801.66	Critical	
35516	CA-2012-461007640-4091	2/19/2012	2/25/2012	Standard Class	AB-10015402	Aaron Bergman	Consumer		78017	Arlington	Texas	CentralUS	USCA	OFF-ST	Office St. Storage	Also She	412.52	2	0.2	42.52	137	Low	
12065	ES-2015-PJ1883564-4225	9/8/2015	9/14/2015	Standard Class	PJ-1883564	Pamela Jones	Corporate		Prato	Tuscany	Italy	Southern Europe	Europe	OFF-AP	Office St. Applano	Hovoe S	*****	14	0	*****	778.32	Low	
22036	IN-2015-JS166951-42035	1/31/2015	2/10/2015	First Class	JS-166951	Jim Siki	Corporate		Torremola	Queensland	Australia	Oceania	Asia Pacific	TEC-CO	Technical Copiers	Brother F	*****	5	0	1428.40	769.93	Critical	
49463	TC-2015-PH16551129-4234	12/5/2015	12/17/2015	Second Class	PH-16551129	Riza Hightower	Consumer		Ulinica	Tanzania	Tanzania	Eastern Africa	Africa	OFF-AP	Office St. Applano	Kichend	*****	6	0	8019.28	763.38	High	
46630	PL-2013-AB001013-4194	8/6/2013	8/10/2013	First Class	AB-000103	Ann Blume	Corporate		Bytom	Silesia	Poland	Eastern Europe	Europe	FUR-CH	Furniture Tables	HonCor	*****	4	0	8278.94	754.47	Critical	
36260	CA-2012-461007640-4091	3/16/2012	3/17/2012	First Class	AB-10015404	Aaron Bergman	Consumer	38013	Seattle	Washington	United States	WesternUS	USCA	OFF-ST	Office St. Storage	Caneta I	8242.34	3	0	44.06	1.03	High	
21596	IN-2012-AB123252-41930	5/12/2012	5/22/2012	First Class	AB-123252	Jason Hancock	Corporate		Sathya	Arundel	China	Eastern Asia	Asia Pacific	FUR-CH	Furniture Chairs	SAFCO I	*****	6	0	8359.02	752.47	Critical	
18528	ES-2014-LB1679193-4185	2/12/2014	3/1/2014	Second Class	LB-1679193	Laurel Bethan	Home Office		Edinburgh	Scotland	United Kingdom	Northern Europe	Europe	OFF-AP	Office St. Applano	Kichend	*****	10	0	*****	730.31	High	
570	US-2016-AP162552-4221	1/31/2016	1/31/2016	First Class	AP-162552	Nancy Dell	Consumer		Alahuahua	Chihuahua	Mexico	Central America	LATAM	FUR-CH	Furniture Tables	Motorola	*****	4	0	8445.52	728.57	Critical	
3464	MX-2015-UD187019-4225	9/5/2015	9/6/2015	First Class	UD-187019	Valerie Dominguez	Consumer		San Salvador	San Salvador	El Salvador	Central America	LATAM	FUR-CH	Furniture Tables	HonCor	*****	6	0	8325.50	728.38	Critical	
30191	IN-2012-PB161027-41951	12/16/2012	12/18/2012	First Class	PB-161027	Philip Beaver	Corporate		Taipei City	Taiwan	Taiwan	Eastern Asia	Asia Pacific	FUR-CH	Furniture Tables	Leoro Co	*****	2	0	8720.36	725.77	Critical	
1645	ES-2012-EB110041-4091	12/12/2012	12/13/2012	Second Class	EB-110041	Eugene Barbach	Consumer		Leipzig	Saxony	Germany	Western Europe	Europe	OFF-AP	Office St. Applano	Hovoe S	*****	6	0	1451.68	704.05	Critical	
36460	CA-2012-461007640-4195	12/12/2012	12/13/2012	Second Class	AB-10015404	Aaron Bergman	Corporate	12180	Troy	New York	United States	EasternUS	USCA	OFF-AC	Technical Accessory	Verham	134.77	0	0	1421.44	15.2	Critical	
22293	IN-2013-EP123559-41323	2/24/2013	2/24/2013	Same Day	EP-123559	Benjamin Patterson	Consumer		Surat	Gujarat	India	Southern Asia	Asia Pacific	FUR-CH	Furniture Chairs	Office St	*****	4	0	8582.36	704.05	Critical	
220	US-2012-PR165236-4129	12/12/2012	12/26/2012	Second Class	PR-165236	Rick Reed	Corporate		Santo Domingo	Santo Domingo	Dominican Republic	Caribbean	LATAM	TEC-PH	Technical Phones	Samsumg	*****	5	0.2	*****	704.05	Critical	
16448	ES-2013-EP116551-4185	1/10/2013	1/16/2013	First Class	EP-116551	Shi Shorley	Corporate		Santo Domingo	Buenos Aires	Argentina	Western Europe	Europe	TEC-MA	Technical Machines	Didia I	*****	5	0	8753.16	658.95	Critical	
40277	CA-2013-461007640-4195	12/27/2013	12/29/2013	Standard Class	AB-10015404	Aaron Bergman	Corporate	94122	San Francisco	California	United States	WesternUS	USCA	TEC-PH	Technical Phones	Geenar	6666.16	9	0.2	175.17	45.74	Medium	
40278	CA-2013-461007640-4195	12/27/2013	12/29/2013	Standard Class	AB-10015404	Aaron Bergman	Corporate	94122	San Francisco	California	United States	WesternUS	USCA	TEC-PH	Technical Phones	Samsumg	*****	5	0	8551.68	658.95	Critical	
36651	CG-2012-461007640-4195	9/13/2012	9/14/2012	First Class	AB-10015404	Aaron Bergman	Corporate	30004	Los Angeles	California	United States	Central Africa	Africa	TEC-PH	Technical Phones	Apple S	*****	6	0	*****	578.15	High	
40100	CA-2012-461007640-4195	5/12/2012	5/16/2012	First Class	AB-10015404	Aaron Bergman	Corporate	10015	New York City	California	United States	WesternUS	USCA	FUR-CH	Furniture Chairs	Isoberg I	8273.49	6	0.2	820.36	110.93	Medium	
15306	ES-2015-PO1666103-420	1/14/2015	1/16/2015	Standard Class	PO-1666103	Patrick O'Donnell	Consumer		Stockton-on-Tees	England	United Kingdom	Northern Europe	Europe	TEC-CO	Technical Copiers	Brother F	*****	13	0	*****	666.96	High	
26046	IN-2012-CL12857-40918	1/10/2012	1/11/2012	First Class	CL-12857	Dan Lavera	Consumer		Brisbane	Queensland	Australia	Oceania	Asia Pacific	TEC-PH	Technical Phones	Nokia S	*****	5	0	1511.10	665.27	Medium	
2118	D-2014-ER1000015-41873	8/22/2014	9/25/2014	Standard Class	ER-1000015	Jay-Bell	Consumer		Mataram	Nusa Tenggara Barat	Indonesia	Southeast Asia	Asia Pacific	TEC-PH	Technical Phones	Motorola	*****	6	0	1477.20	660.73	High	
21872	IN-2015-BF160559-4219	1/11/2015	1/15/2015	Standard Class	BF-160559	Bary Franz	Home Office		Gwalahpur	Haryana	India	Southern Asia	Asia Pacific	TEC-PH	Technical Phones	Motorola	*****	7	0	8632.52	658.95	High	
25795	IN-2015-VG160559-4221	9/26/2015	9/28/2015	Second Class	VG-160559	Vivek Grady	Corporate		Thiruvananthapuram	Kerala	India	Southern Asia	Asia Pacific	FUR-BO	Furniture Bookcases	Sauder C	*****	13	0	*****	658.95	Medium	
1661	ES-2013-GT14171019-4182	12/15/2013	12/17/2013	Standard Class	GT-14171019	Greg Tien	Consumer		Maddalena	Sardinia	Italy	Northern Europe	Europe	TEC-PH	Technical Phones	Motorola	*****	9	0	8404.73	656.73	High	
19593	IT-2012-CZ129048-41774	3/22/2012	3/24/2012	First Class	CZ-129048	Zuchus Carol	Consumer		Belin	Germany	Germany	Western Europe	Europe	OFF-AP	Office St. Applano	Cuisinart	*****	7	0.2	173.24	655.31	Critical	
34608	CA-2014-461007640-4171	3/21/2014	3/26/2014	Second Class	AB-10015404	Aaron Bergman	Corporate	39503	Belmont	Massachusetts	United States	SouthernUS	USCA	FUR-CH	Furniture Chairs	Edison I	165.45	7	0	1330.04	5.73	Medium	
12947	IT-2014-ER1000015-41778	3/16/2014	3/16/2014	Same Day	ER-1000015	Elia Ballard	Corporate		Ronowall	France	France	Western Europe	Europe	FUR-CH	Furniture Chairs	Office St	*****	5	0	14720.75	652.38	Critical	
24341	IN-2015-AP162521-42344	6/28/2015	6/28/2015	First Class	AP-162521	Anshu Pichip	Consumer		Shougang	Shandong	China	Eastern Asia	Asia Pacific	FUR-CH	Furniture Chairs	Novente	*****	6	0	1410.34	644.75	High	
20701	IN-2015-SV12027559-4212	5/12/2015	5/12/2015	Same Day	SV-12027559	Scott Williamson	Consumer		Jamshedpur	Jharkhand	India	Southern Asia	Asia Pacific	TEC-MA	Technical Machine	Koninkl	*****	7	0	8500.01	637.05	Critical	

## Flow of components

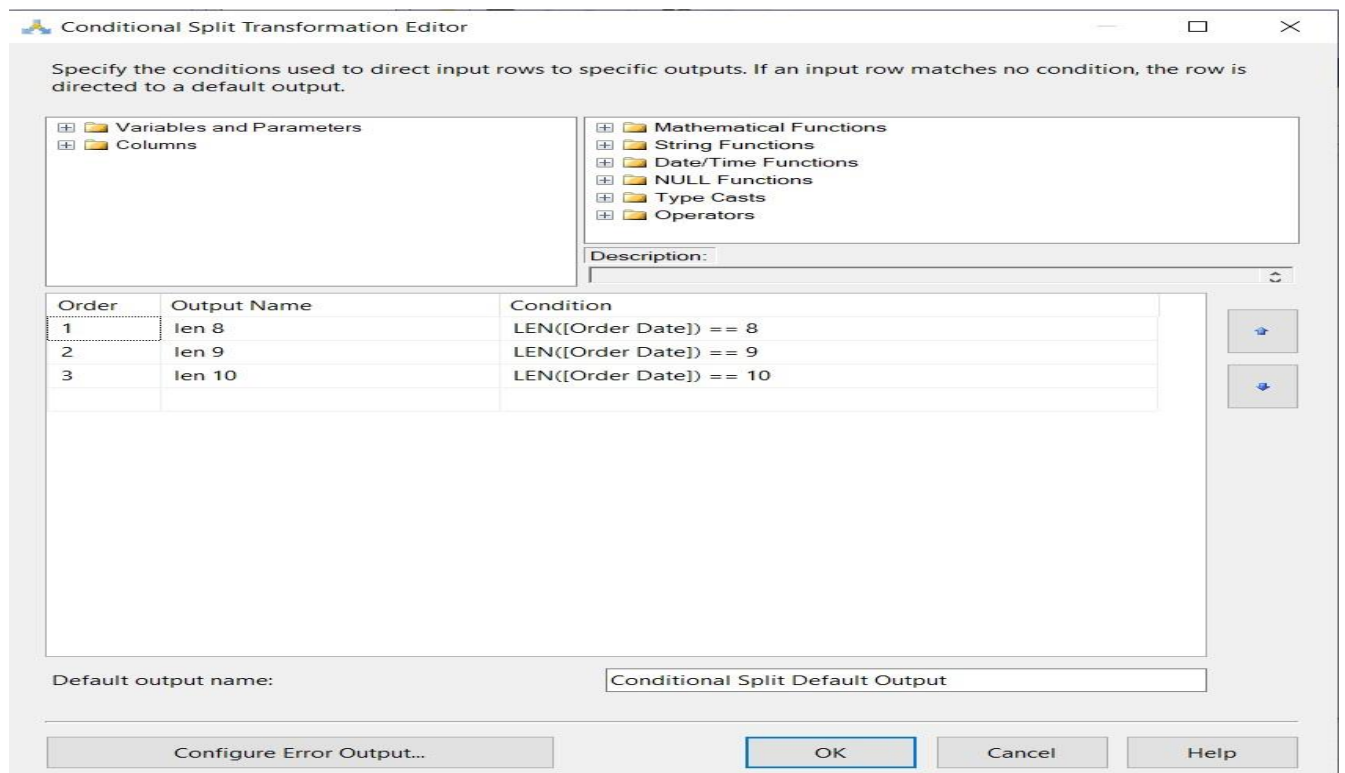
### 1- Flat File:



## Flat File source :



## Conditional split :



## Len 9:

**Conditional Split Transformation Editor**

Specify the conditions used to direct input rows to specific outputs. If an input row matches no condition, the row is directed to a default output.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Order	Output Name	Condition
1	MM+0	SUBSTRING([Order Date],2,1) == "/"

Default output name: Conditional Split Default Output

Configure Error Output... OK Cancel Help

## Len 8:

**Derived Column Transformation Editor**

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length	Precision	Scale	Code Page
Order Date	Replace 'Order Date'	"0" + SUBSTRING([Order Date],1,1) + "-" + SUBST...	string [DT_STR]	50			1252 (ANSI - Latin I)

Configure Error Output... OK Cancel Help



M-DD :

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Le
Order Date	Replace 'Order Date'	"0" + SUBSTRING([Order Date],1,1) + "-" + SUBSTR...	string [DT_STR]	50

Configure Error Output... OK Cancel Help

MM-D:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Le
Order Date	Replace 'Order Date'	SUBSTRING([Order Date],1,2) + "-0" + SUBSTRING([...	string [DT_STR]	50

Configure Error Output... OK Cancel Help

## Len 10:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
Order Date	Replace 'Order Date'	SUBSTRING([Order Date],1,2) + "-" + SUBSTRING([...	string [DT_STR]	50

Configure Error Output...

OK Cancel Help

## Union all:

Union All Transformation Editor

Configure the properties used to merge multiple inputs into one output by creating mappings between columns.

Output Column Name	Union All Input 1	Union All Input 2	Union All Input 3	Union All Input 4
Row ID	Row ID	Row ID	Row ID	Row ID
Order ID	Order ID	Order ID	Order ID	Order ID
Order Date	Order Date	Order Date	Order Date	Order Date
Ship Mode	Ship Mode	Ship Mode	Ship Mode	Ship Mode
Customer ID	Customer ID	Customer ID	Customer ID	Customer ID
Customer Name	Customer Name	Customer Name	Customer Name	Customer Name
Segment	Segment	Segment	Segment	Segment
City	City	City	City	City
Country	Country	Country	Country	Country
Region	Region	Region	Region	Region
Market	Market	Market	Market	Market
Category	Category	Category	Category	Category
Sales	Sales	Sales	Sales	Sales
Quantity	Quantity	Quantity	Quantity	Quantity
Discount	Discount	Discount	Discount	Discount
Profit	Profit	Profit	Profit	Profit
Shipping Cost	Shipping Cost	Shipping Cost	Shipping Cost	Shipping Cost
Order Priority	Order Priority	Order Priority	Order Priority	Order Priority

OK Cancel Help

## String Functions:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
Upper Country	<add as new column>	UPPER(Country)	Unicode string [DT_WST...	50
Len Customer Name	<add as new column>	LEN([Customer Name])	four-byte signed intege...	2
Left Order ID	<add as new column>	LEFT([Order ID],2)	Unicode string [DT_WST...	2
Reverse City	<add as new column>	REVERSE(City)	Unicode string [DT_WST...	50

Configure Error Output...

OK Cancel Help

## Data Conversion:

Data Conversion Transformation Editor

Configure the properties used to convert the data type of an input column to a different data type. Depending on the data type to which the column is converted, set the length, precision, scale, and code page of the column.

Available Input Columns

☒ Name

☒ Row ID

☒ Order ID

☒ Order Date

☒ Ship Mode

☒ Customer ID

☒ Customer Name

☒ Segment



## Split Quantity:

Conditional Split Transformation Editor

Specify the conditions used to direct input rows to specific outputs. If an input row matches no condition, the row is directed to a default output.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Order	Output Name	Condition
1	Split quantity greater than 6	[Copy of Quantity] > 6

Default output name: Conditional Split Default Output

Configure Error Output... OK Cancel Help

## OLE DB QTY Greater than 6:

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB provider.

Connection Manager Mappings Error Output

Specify an OLE DB connection manager, a data source, or a data source view, and select the data access method.

Create Table

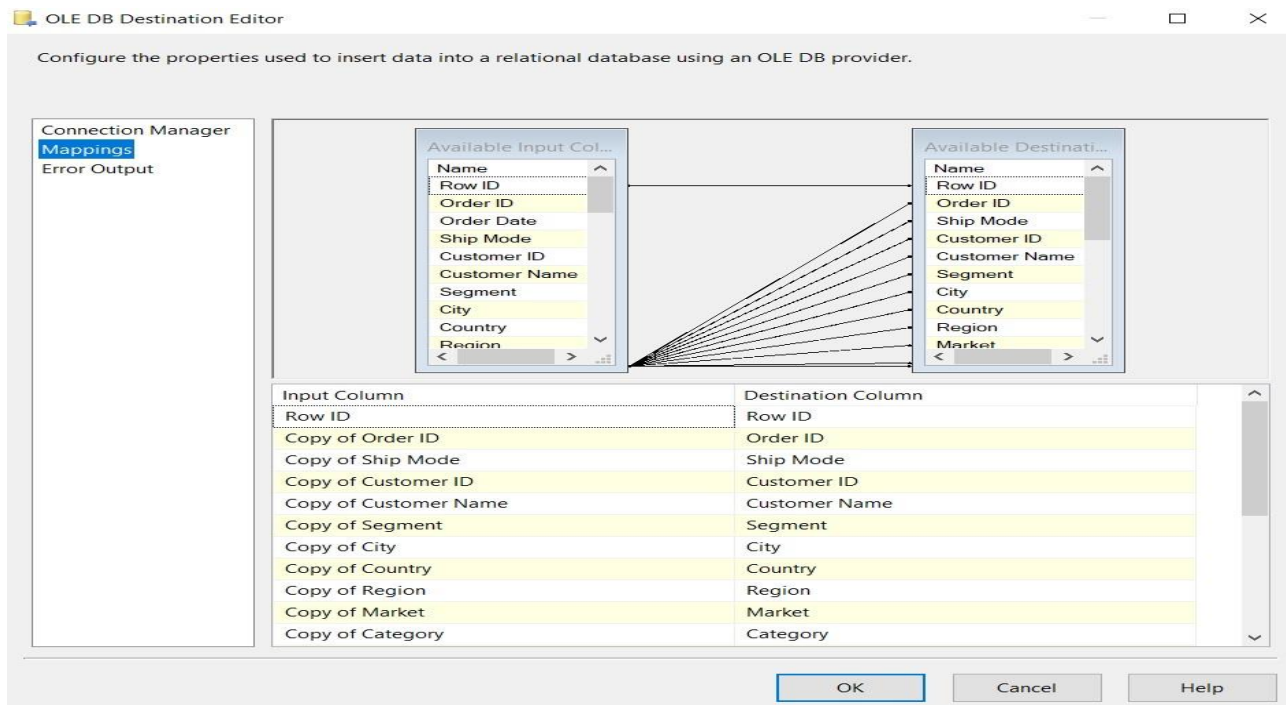
[Customer ID] varchar(50),  
[Customer Name] varchar(50),  
[Segment] varchar(50),  
[City] varchar(50),  
[Country] varchar(50),  
[Region] varchar(50),  
[Market] varchar(50),  
[Category] varchar(50),  
[Sales] varchar(50),  
[Quantity] varchar(50),  
[Discount] varchar(50),  
[Profit] varchar(50),  
[Shipping Cost] varchar(50),  
[Order Priority] varchar(50),  
[Upper Country] nvarchar(50),  
[Len Customer Name] int,  
[Left Order ID] nvarchar(2),  
[Reverse City] nvarchar(50),  
)

OK Cancel

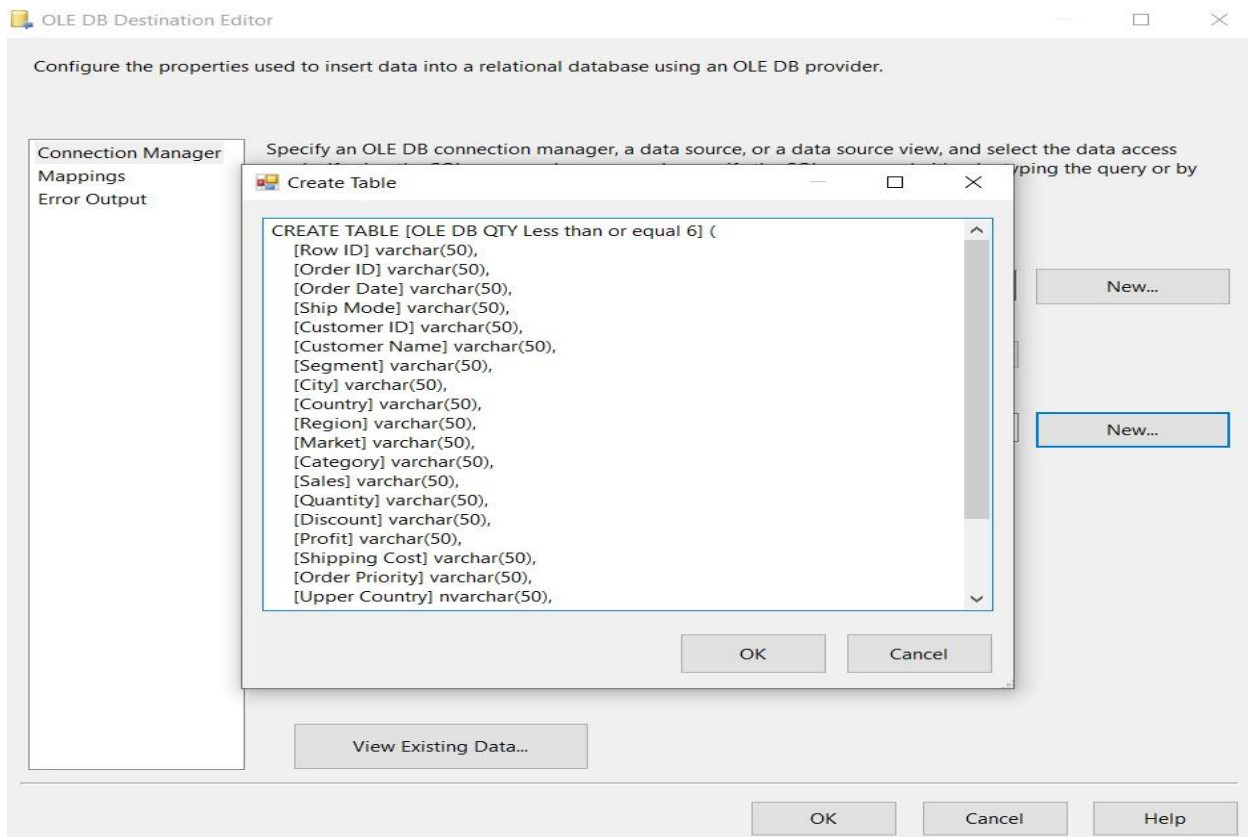
View Existing Data...

New... New...

OK Cancel Help



OLE DB QTY Less than or equal 6:

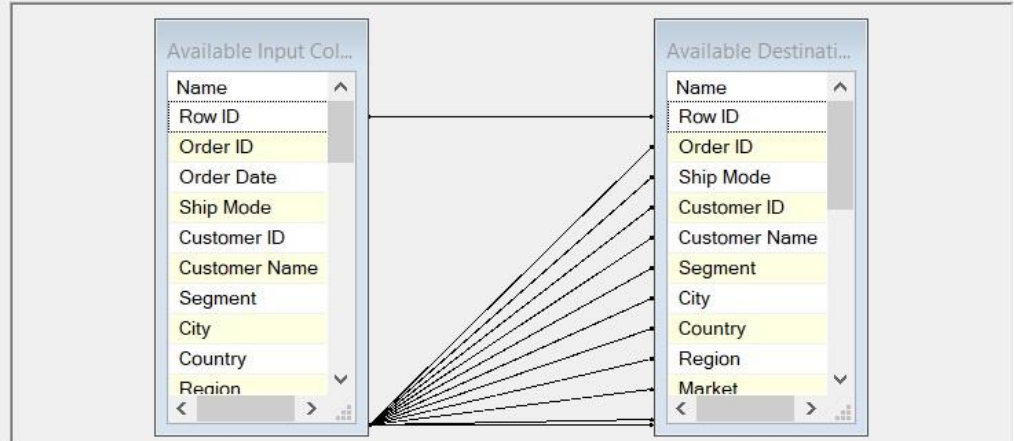


Configure the properties used to insert data into a relational database using an OLE DB provider.

Connection Manager

Mappings

Error Output



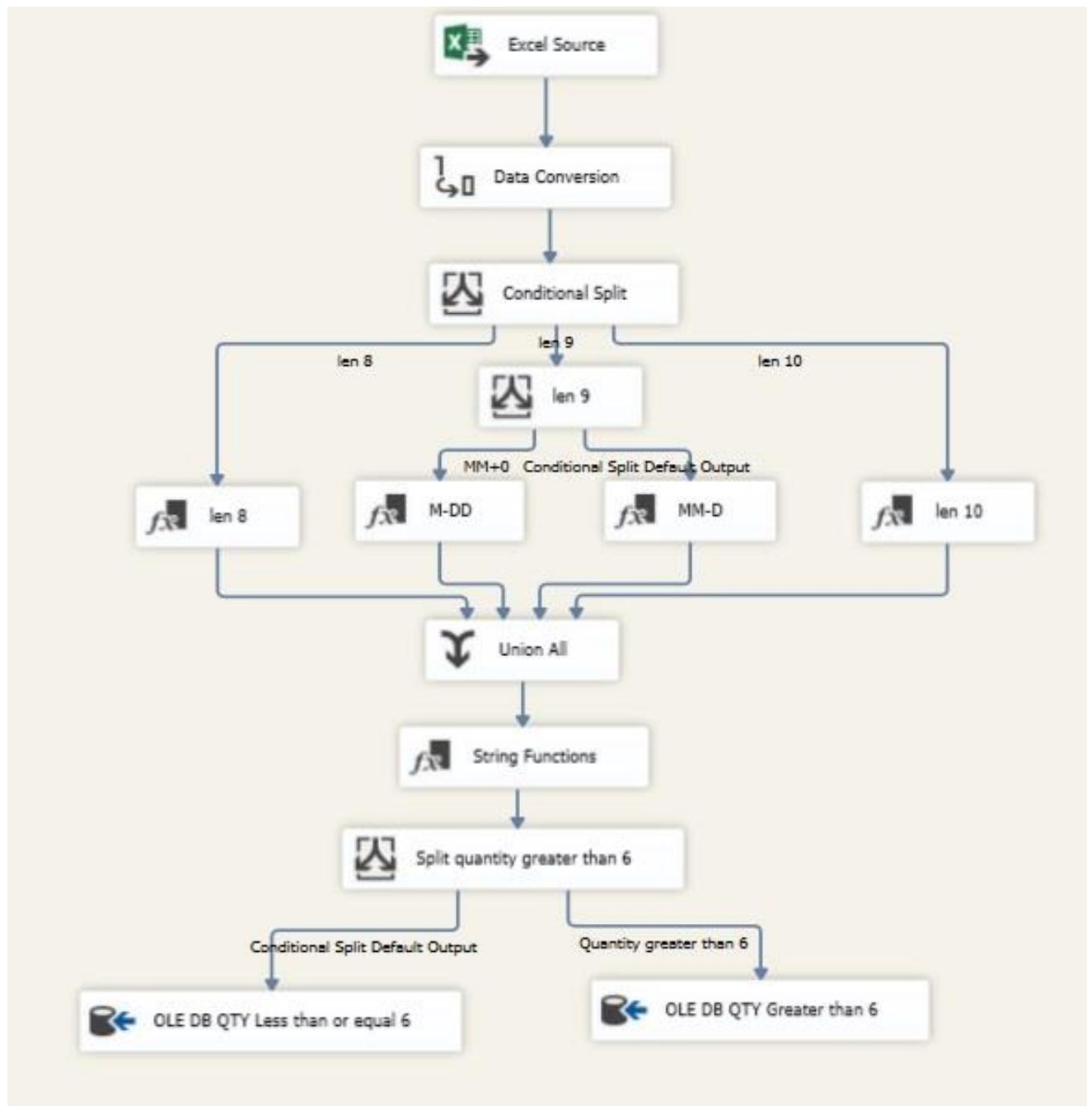
Input Column	Destination Column
Row ID	Row ID
Copy of Order ID	Order ID
Copy of Ship Mode	Ship Mode
Copy of Customer ID	Customer ID
Copy of Customer Name	Customer Name
Copy of Segment	Segment
Copy of City	City
Copy of Country	Country
Copy of Region	Region
Copy of Market	Market
Copy of Category	Category

OK

Cancel

Help

## 2- Excel :



## Excel Source:

Excel Source Editor

Configure the properties that enable the Data Flow task to obtain data from Excel provider.

Connection Manager  
Columns  
Error Output

Available External Columns

- ☒ Name
- ☒ Row ID
- ☒ Order ID
- ☒ Order Date
- ☒ Ship Mode
- ☒ Customer ID
- ☒ Customer Name
- ☒ Segment
- ☒ City
- ☒ Country
- ☒ Region

External Column	Output Column
Row ID	Row ID
Order ID	Order ID
Order Date	Order Date
Customer ID	Customer ID
Customer Name	Customer Name
Segment	Segment
City	City
Country	Country
Region	Region
Market	Market
Category	Category

OK Cancel Help

## Data Conversion:

Data Conversion Transformation Editor

Configure the properties used to convert the data type of an input column to a different data type. Depending on the data type to which the column is converted, set the length, precision, scale, and code page of the column.

Available Input Columns

- ☒ Name
- ☐ Row ID
- ☐ Order ID
- ☒ Order Date
- ☐ Customer ID
- ☐ Customer Name
- ☐ Segment
- ☐ City

Input Column	Output Alias	Data Type	Length	Precision	Scale	Code Page
Order Date	OrderDate	Unicode string [DT_WSTR]	50			

Configure Error Output... OK Cancel Help



## Conditional Split:

Conditional Split Transformation Editor

Specify the conditions used to direct input rows to specific outputs. If an input row matches no condition, the row is directed to a default output.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Order	Output Name	Condition
1	len 8	LEN(OrderDate) == 8
2	len 9	LEN(OrderDate) == 9
3	len 10	LEN(OrderDate) == 10

Default output name: Conditional Split Default Output

Configure Error Output... OK Cancel Help

## Len 9:

Conditional Split Transformation Editor

Specify the conditions used to direct input rows to specific outputs. If an input row matches no condition, the row is directed to a default output.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Order	Output Name	Condition
1	MM+0	SUBSTRING(OrderDate,2,1) == "/"

Default output name: Conditional Split Default Output

Configure Error Output... OK Cancel Help

Len 8:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
OrderDate	Replace 'OrderDate'	"0" + SUBSTRING(OrderDate,1,1) + "-" + SUBSTRIN...	Unicode string [DT_WST...	50

Configure Error Output... OK Cancel Help

M-DD:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
OrderDate	Replace 'OrderDate'	"0" + SUBSTRING(OrderDate,1,1) + "-" + SUBSTRIN...	Unicode string [DT_WST...	50

Configure Error Output... OK Cancel Help

MM-D:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
OrderDate	Replace 'OrderDate'	SUBSTRING(OrderDate,1,2) + "-0" + SUBSTRING(Ord...	Unicode string [DT_WST...	50

Configure Error Output... OK Cancel Help

Len 10:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length
OrderDate	Replace 'OrderDate'	SUBSTRING(OrderDate,1,2) + "- " + SUBSTRING(Ord...	Unicode string [DT_WST...	50

Configure Error Output... OK Cancel Help

## Union All:

Union All Transformation Editor

Configure the properties used to merge multiple inputs into one output by creating mappings between columns.

Output Column Name	Union All Input 5	Union All Input 1	Union All Input 2	Union All Input 3
Row ID	Row ID	Row ID	Row ID	Row ID
Order ID	Order ID	Order ID	Order ID	Order ID
Order Date	Order Date	Order Date	Order Date	Order Date
Customer ID	Customer ID	Customer ID	Customer ID	Customer ID
Customer Name	Customer Name	Customer Name	Customer Name	Customer Name
Segment	Segment	Segment	Segment	Segment
City	City	City	City	City
Country	Country	Country	Country	Country
Region	Region	Region	Region	Region
Market	Market	Market	Market	Market
Category	Category	Category	Category	Category
Sales	Sales	Sales	Sales	Sales
Quantity	Quantity	Quantity	Quantity	Quantity
Discount	Discount	Discount	Discount	Discount
Profit	Profit	Profit	Profit	Profit
Shipping Cost	Shipping Cost	Shipping Cost	Shipping Cost	Shipping Cost
Order Priority	Order Priority	Order Priority	Order Priority	Order Priority
Ship Mode	Ship Mode	Ship Mode	Ship Mode	Ship Mode
OrderDate	OrderDate	OrderDate	OrderDate	OrderDate

OK Cancel Help

## String Functions:

Derived Column Transformation Editor

Specify the expressions used to create new column values, and indicate whether the values update existing columns or populate new columns.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Derived Column Name	Derived Column	Expression	Data Type	Length	Precision
Upper Country	<add as new column>	UPPER(Country)	Unicode string [DT_WST...	255	
Len Customer Name	<add as new column>	LEN([Customer Name])	four-byte signed intege...		
Left Order ID	<add as new column>	LEFT([Order ID],2)	Unicode string [DT_WST...	2	
Reverse City	<add as new column>	REVERSE(City)	Unicode string [DT_WST...	255	

Configure Error Output... OK Cancel Help

Split quantity greater than 6:

Conditional Split Transformation Editor

Specify the conditions used to direct input rows to specific outputs. If an input row matches no condition, the row is directed to a default output.

Variables and Parameters

Columns

Mathematical Functions

String Functions

Date/Time Functions

NULL Functions

Type Casts

Operators

Description:

Order	Output Name	Condition
1	Quantity greater than 6	Quantity > 6

Default output name: Conditional Split Default Output

Configure Error Output... OK Cancel Help

OLE DB QTY Greater than 6:

OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB provider.

Connection Manager

Mappings

Error Output

Specify an OLE DB connection manager, a data source, or a data source view, and select the data access method for the query or by

Create Table

```
CREATE TABLE [OLE DB QTY Greater than 6] (  
[Row ID] float,  
[Order ID] nvarchar(255),  
[Order Date] datetime,  
[Customer ID] nvarchar(255),  
[Customer Name] nvarchar(255),  
[Segment] nvarchar(255),  
[City] nvarchar(255),  
[Country] nvarchar(255),  
[Region] nvarchar(255),  
[Market] nvarchar(255),  
[Category] nvarchar(255),  
[Sales] money,  
[Quantity] float,  
[Discount] float,  
[Profit] money,  
[Shipping Cost] float,  
[Order Priority] nvarchar(255),  
[Ship Mode] nvarchar(255),  
[OrderDate] nvarchar(50),  
)
```

OK Cancel

New... New...

View Existing Data...

OK Cancel Help

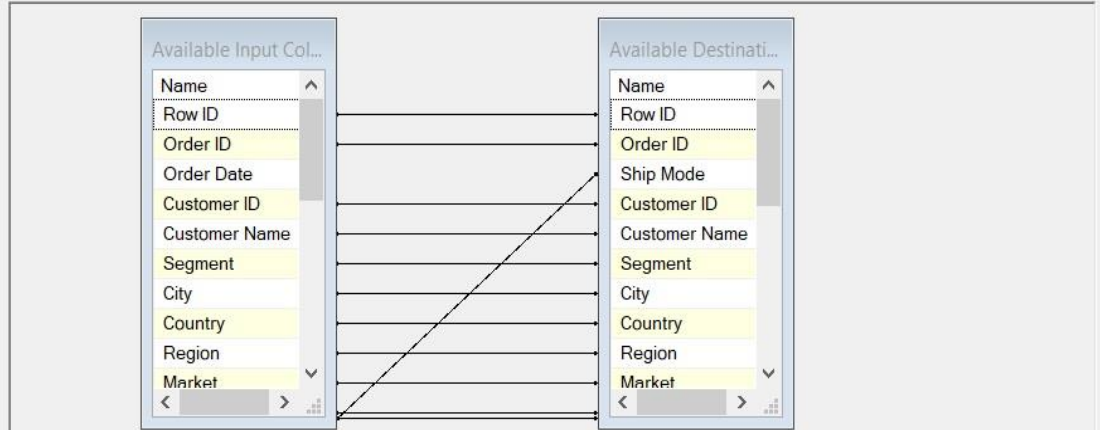


Configure the properties used to insert data into a relational database using an OLE DB provider.

Connection Manager

Mappings

Error Output



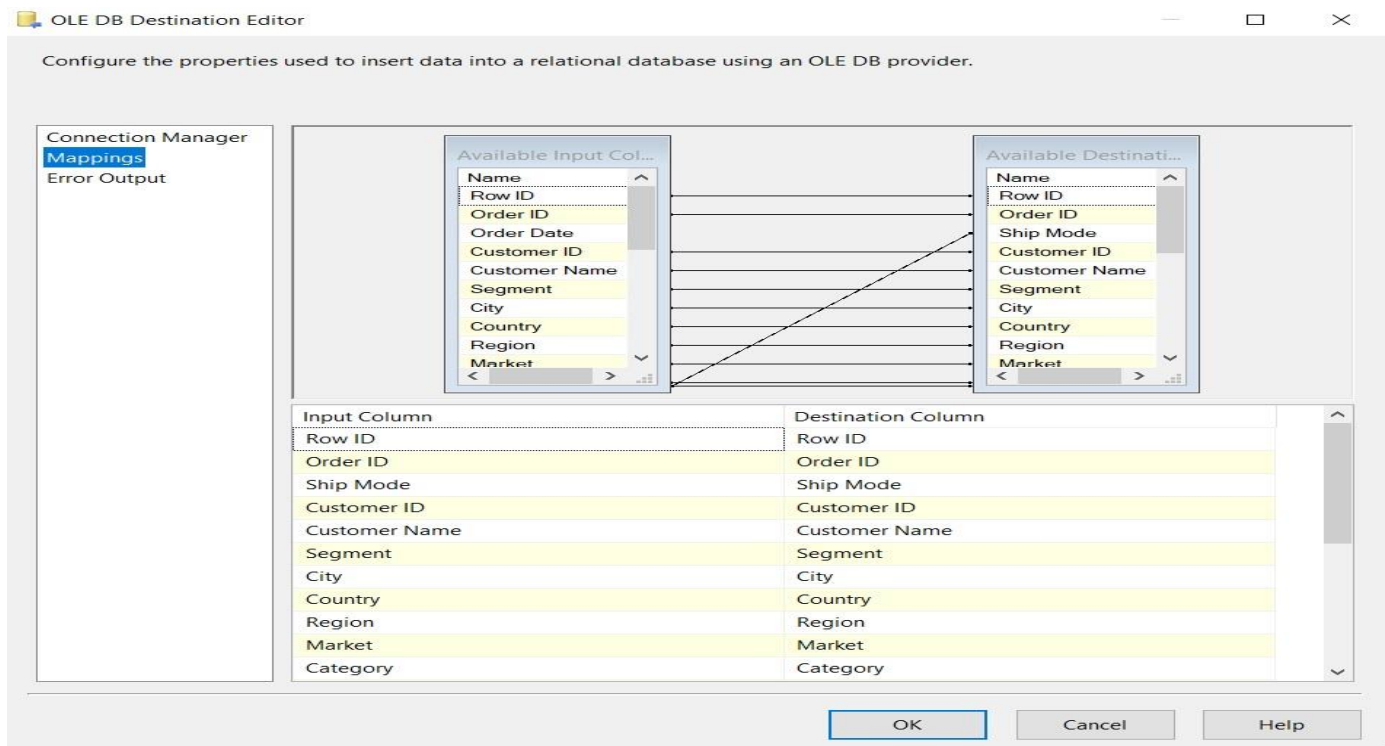
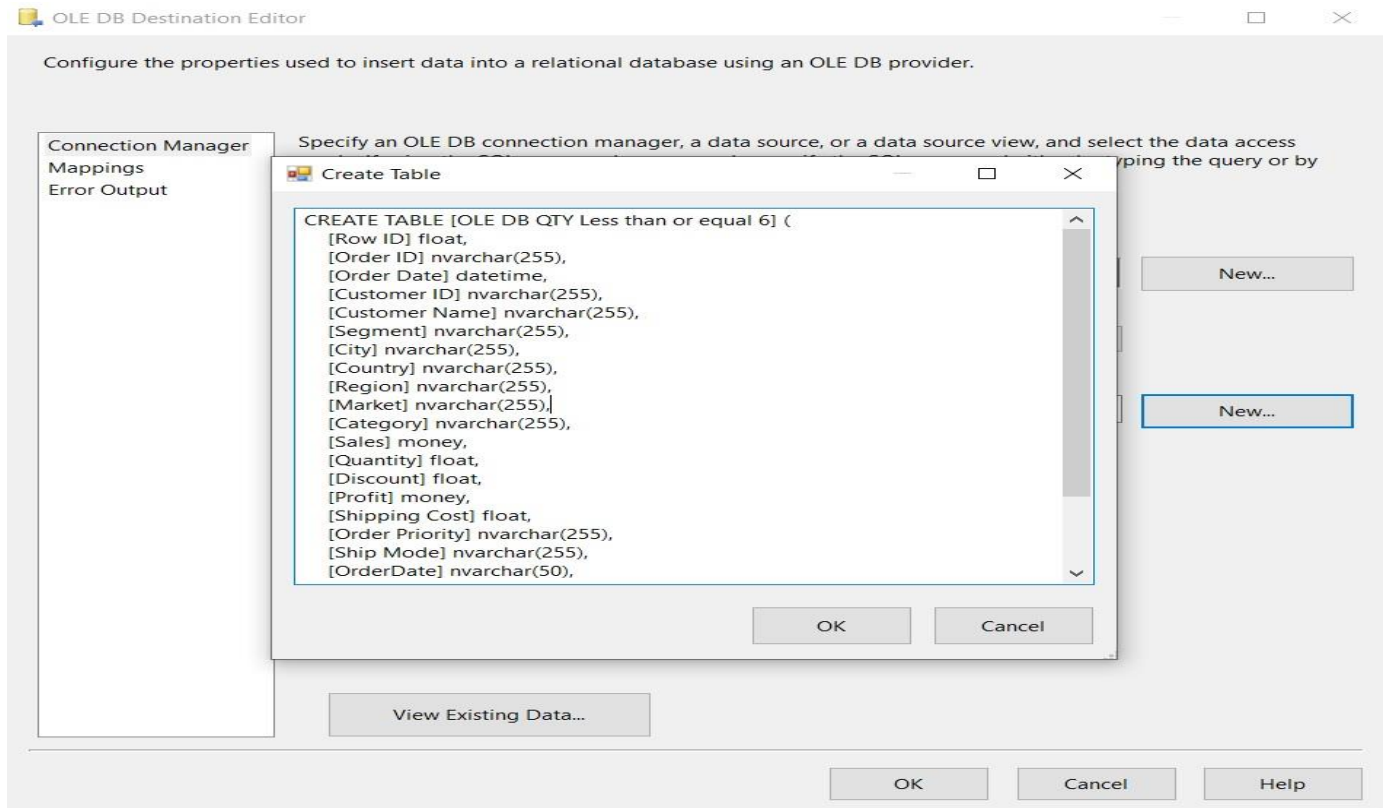
Input Column	Destination Column
Row ID	Row ID
Order ID	Order ID
Ship Mode	Ship Mode
Customer ID	Customer ID
Customer Name	Customer Name
Segment	Segment
City	City
Country	Country
Region	Region
Market	Market
Category	Category

OK

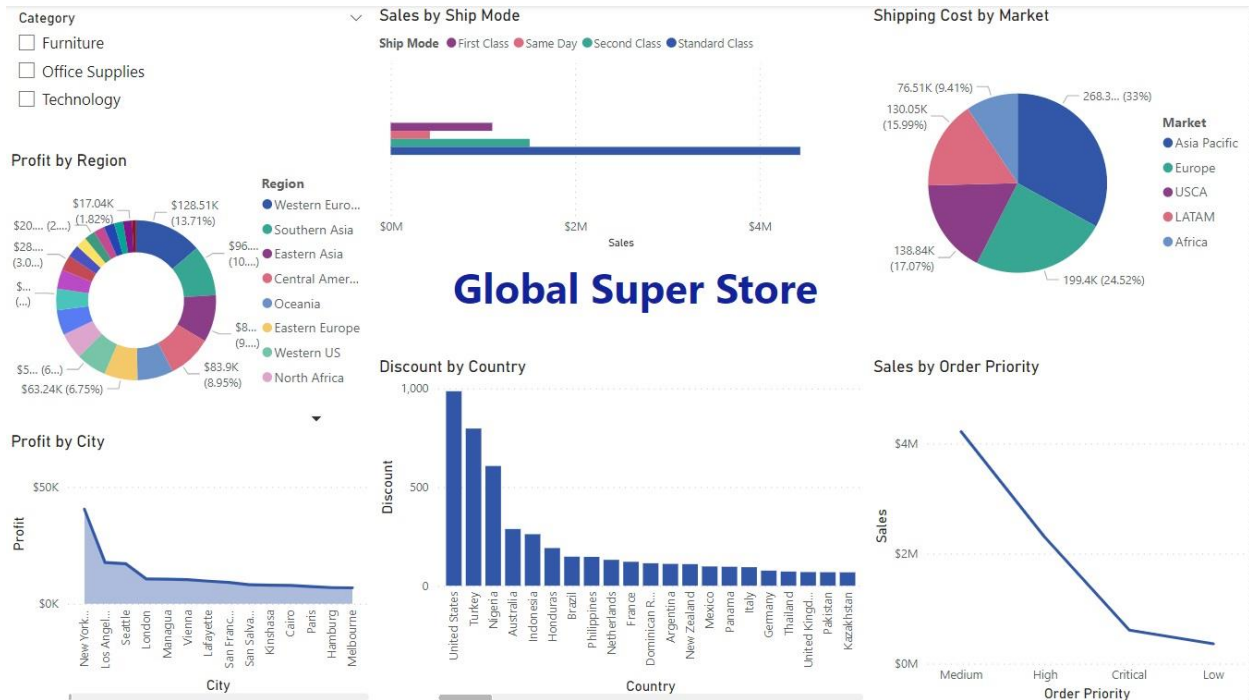
Cancel

Help

## OLE DB QTY Less than or equal 6:

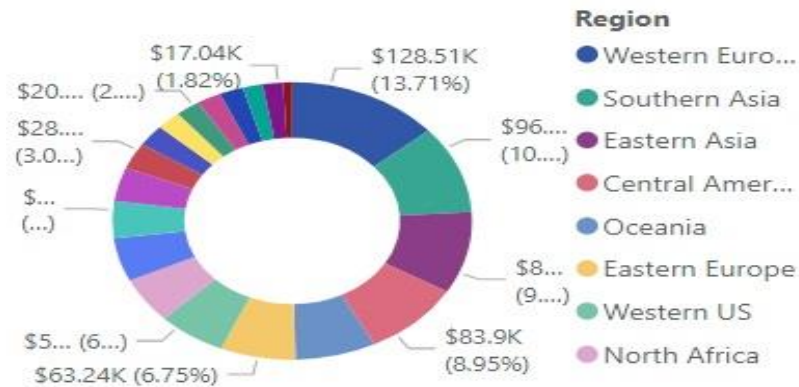


# Power BI Dashboard



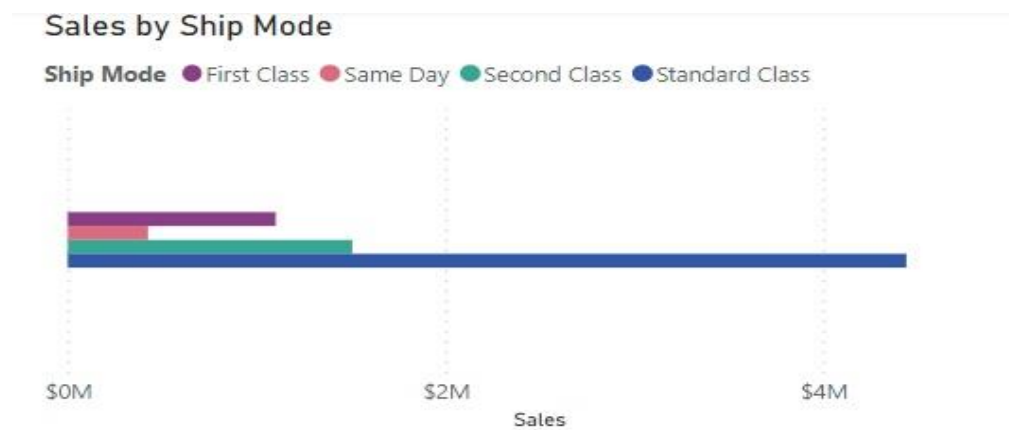
1-donut chart:

Profit by Region



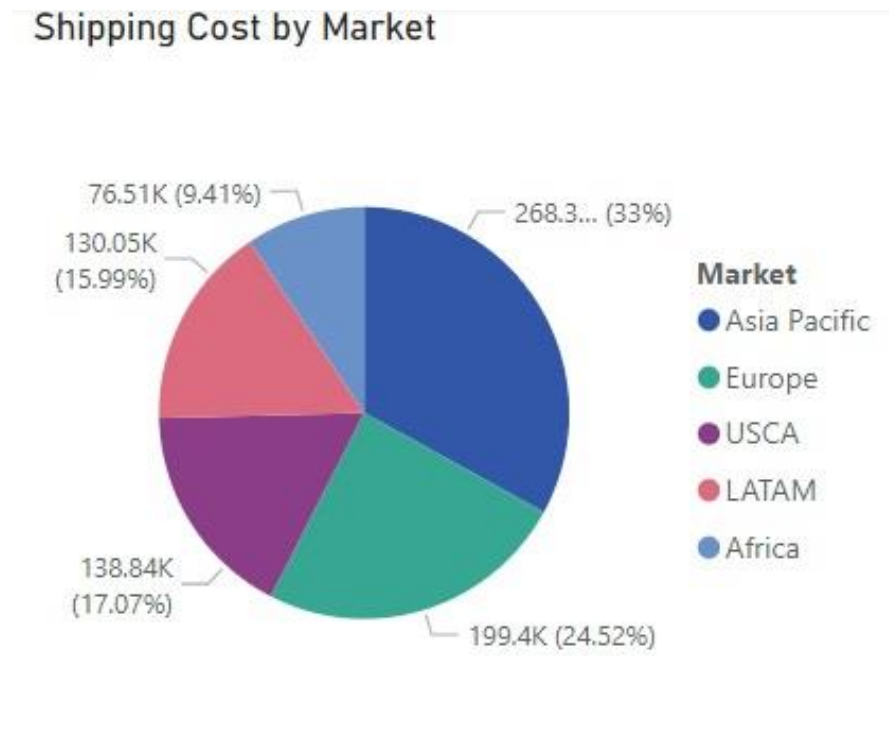
As shown in the previous donut chart, the highest profit in terms of regions is in Western Europe

## 2- Clustered Bar chart:



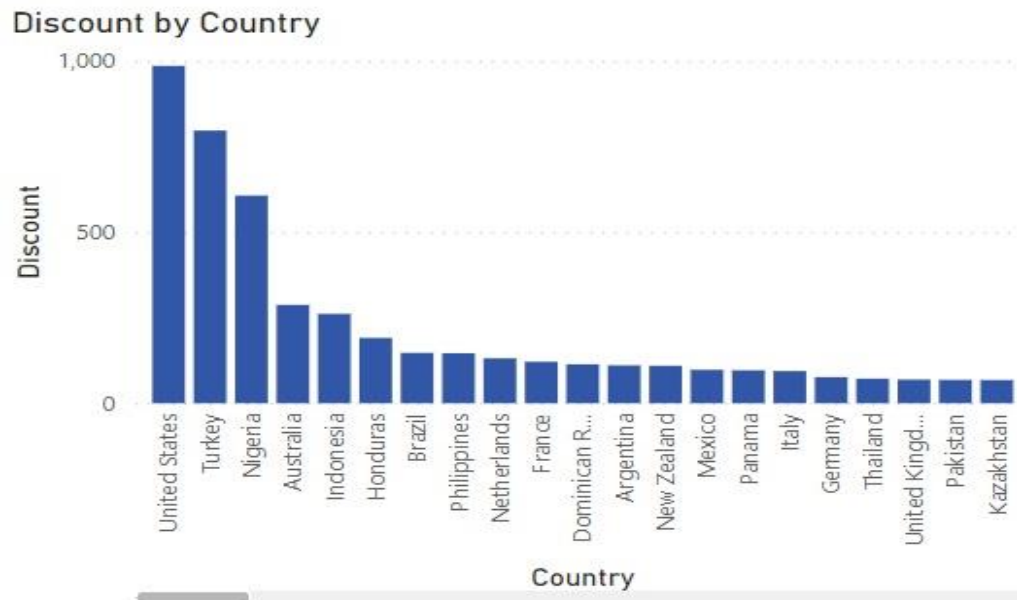
As shown in clustered bar chart, the bestselling ship mode is Standard Class

## 3- Pie chart:



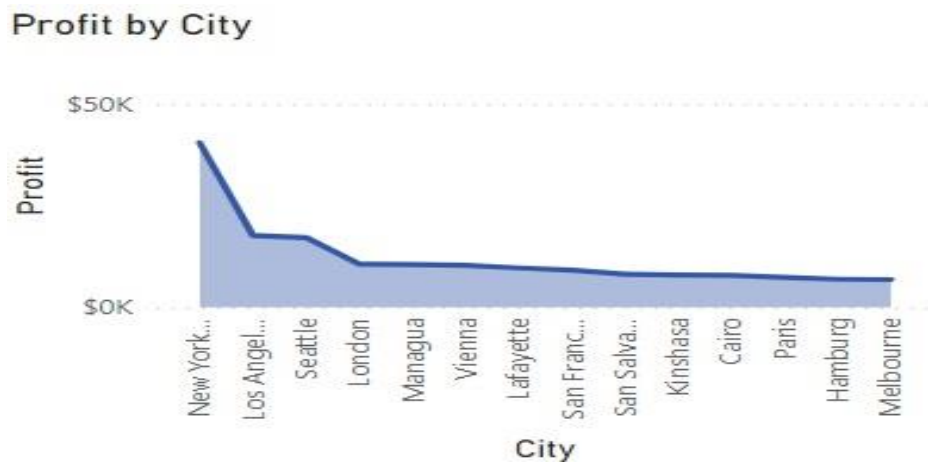
As shown in pie chart, the highest shipping cost in Asia Pacific market.

#### 4- Clustered Column chart:



As shown in clustered column chart, the highest discount is USA

#### 5- Area chart:

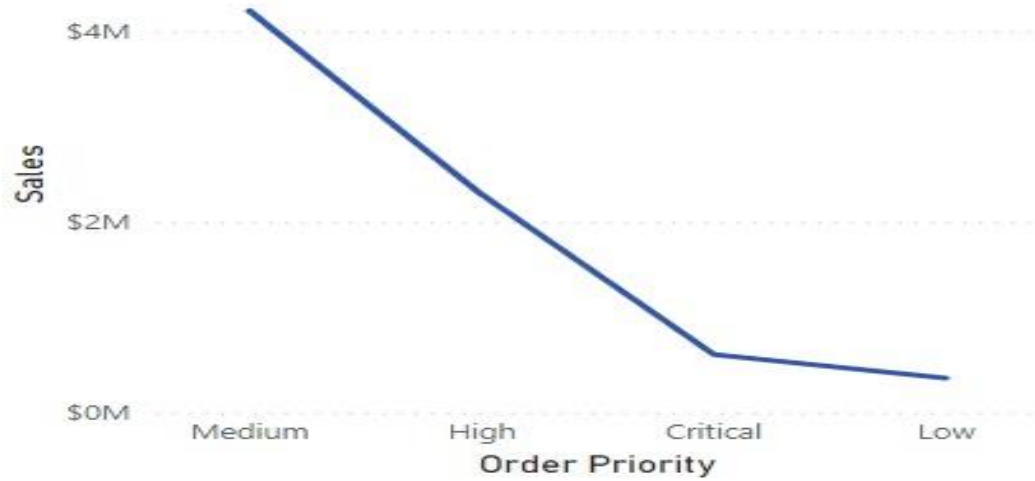


As shown in area chart, the highest profit is New York city in USA



## 6- Line chart:

Sales by Order Priority



As shown in line chart, the bestselling order that is in medium priority