Homework 3: Data Warehouse Lab

1. Which customer has produced the most total revenue for this organization? (TotalRevenue=SalesPrice*Quantity)

Select fact_productsales.customerID,customerName, sum(SalesPrice*Quantity) AS TotalRevenue FROM dim customer

INNER JOIN fact productsales on dim customer.customerID=fact productsales.customerID

WHERE dim customer.customerId=fact productsales.customerID

GROUP BY dim customer.customerID

ORDER BY TotalRevenue DESC

LIMIT 1;



- **Answer:** Aldous Huxley has produced the most revenue for this organization

2. Which salesperson has produced the most total revenue for this organization (TotalRevenue=SalesPrice*Quantity)

select salespersonName, sum(SalesPrice*Quantity) AS TotalRevenue from dim_salesperson

JOIN fact_productsales on dim_salesperson.salespersonID=fact_productsales.salespersonID

GROUP BY dim_salesperson.salespersonID

ORDER BY TotalRevenue DESC

LIMIT 1;



- **Answer:** Julian Brand has produced the most total revenue

3. What is the total revenue by store for each year represented in the data warehouse?

select year, sum(SalesPrice*Quantity) as TotalRevenue from fact_productsales as fps

INNER JOIN dim store as ds on ds.StoreID=fps.StoreID

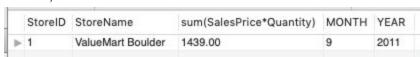
INNER JOIN dim date as dd on dd.dateKey=fps.salesdatekey

	year	storeName	TotalRevenue
A	2010	ValueMart Lyons	1231.00
	2010	ValueMart Boulder	5975.50
	2010	ValueMart Berthoud	1123.00
	2011	ValueMart Berthoud	1737.50
	2011	ValueMart Lyons	2168.00
	2011	ValueMart Boulder	7336.00
	2012	ValueMart Berthoud	1565.50
	2012	ValueMart Lyons	1898.00
	2012	ValueMart Boulder	7286.00
	2013	ValueMart Berthoud	342.00
	2013	ValueMart Lyons	361.00
	2013	ValueMart Boulder	2275.00
	2015	ValueMart Berthoud	1112.50
	2015	ValueMart Lyons	1062.00
	2015	ValueMart Boulder	4608.00
	2016	ValueMart Berthoud	1711.00
	2016	ValueMart Lyons	2339.00
	2016	ValueMart Boulder	6519.00
	2017	ValueMart Berthoud	783.50
	2017	ValueMart Lyons	437.50
	2017	ValueMart Boulder	3746.00

- **Answer:** Answer displayed in the picture

4. Which store had the highest sales dollar volume in September, 2011?

SELECT storeName, sum(SalesPrice*Quantity) as TotalRevenue, month, year from fact_productsales join dim_store on fact_productsales.StoreID=dim_store.StoreID join dim_date on fact_productsales.salesdatekey=dim_date.dateKey where monthName='September' and year=2011 GROUP BY dim_store.storeID, MONTH LIMIT 1;



- **Answer**: ValueMart Boulder had the highest sales dollar volume in September, 2011 with \$1439.00 in total revenue

5. Describe the trend in total revenue for the Boulder store for each quarter in 2016.

select fact_productSales.storeID, storeName, sum(SalesPrice*Quantity) as TotalRevenue, quarter, year from fact_productSales

join Dim_Store on Fact_ProductSales.StoreID = Dim_Store.StoreID

join Dim date on Fact ProductSales.SalesDateKey = Dim date.Datekey

where City = 'Boulder 'and year=2016 group by Fact_ProductSales.StoreID, quarter order by quarter;

	storeID	storeName	TotalRevenue	quarter	year
>	1	ValueMart Boulder	1622.50	1	2016
	1	ValueMart Boulder	1144.50	2	2016
	1	ValueMart Boulder	2259.50	3	2016
	1	ValueMart Boulder	1492.50	4	2016

- **Answer:** There is a decrease in revenue as the quarter increased in 2016