

Homework 5:
Name: Chakrya Ros

Question 1. Which salesperson produced the most total revenue for this organization during 2012?
(Total Revenue = SalesPrice * Quantity)

Quary >

```
SELECT FP.SalesPersonID, ds.SalesPersonName, dd.YEAR,
       SUM(FP.SalesPrice * FP.Quantity) as TotalRevenue
FROM Fact_ProductSales FP JOIN Dim_SalesPerson ds
ON ds.SalesPersonID = FP.SalesPersonID
JOIN Dim_Date dd on FP.SalesDatekey = dd.DateKey WHERE dd.YEAR = '2012'
GROUP BY FP.SalesPersonID ORDER BY TotalRevenue DESC LIMIT 1;
```

	SalesPersonID	SalesPersonName	YEAR	TotalRevenue
▶	4	Julian Brand	2012	2885.50

Question 2. Which customer's revenue increased the most from 2012 to 2013? (Total Revenue = SalesPrice * Quantity)

Quary >

```
SELECT dc.CustomerID, dc.CustomerName, SUM(FP.SalesPrice * FP.Quantity) as Amount
FROM Dim_Customer dc JOIN Fact_ProductSales FP
ON FP.CustomerID = dc.CustomerID
JOIN Dim_date dd ON FP.SalesDateKey = dd.DateKey
WHERE dd.YEAR BETWEEN 2012 AND 2013
GROUP BY FP.CustomerID ORDER BY Amount DESC LIMIT 1;
```

CustomerID	CustomerName	Amount
4	Aldous Huxley	5822.00

Question 3. Rank all stores by their total revenue for each year represented in the data warehouse. In other words, for a given year rank the three stores by revenue for that year.

Quary >

```
SELECT ds.StoreID, ds.StoreName, dd.YEAR, SUM(FP.SalesPrice * FP.Quantity) AS Amount
FROM Dim_Store ds
JOIN Fact_ProductSales FP ON ds.StoreID = FP.StoreID
JOIN Dim_Date dd ON FP.SalesDatekey = dd.DateKey
GROUP BY FP.StoreID, dd.YEAR ORDER BY dd.YEAR ASC, Amount DESC;
```

	StoreID	StoreName	YEAR	Amount
►	1	ValueMart Boulder	2010	5975.50
	2	ValueMart Lyons	2010	1231.00
	3	ValueMart Berthoud	2010	1123.00
	1	ValueMart Boulder	2011	7336.00
	2	ValueMart Lyons	2011	2168.00
	3	ValueMart Berthoud	2011	1737.50
	1	ValueMart Boulder	2012	7286.00
	2	ValueMart Lyons	2012	1898.00
	3	ValueMart Berthoud	2012	1565.50
	1	ValueMart Boulder	2013	2275.00
	2	ValueMart Lyons	2013	361.00
	3	ValueMart Berthoud	2013	342.00
	1	ValueMart Boulder	2015	4608.00
	3	ValueMart Berthoud	2015	1112.50
	2	ValueMart Lyons	2015	1062.00
	1	ValueMart Boulder	2016	6519.00
	2	ValueMart Lyons	2016	2339.00
	3	ValueMart Berthoud	2016	1711.00
	1	ValueMart Boulder	2017	3746.00
	3	ValueMart Berthoud	2017	783.50
	2	ValueMart Lyons	2017	437.50

Question 4. Which product yielded the highest profit in 2015? (Profit = (sales price – actual cost) * quantity)

Quary >

```
SELECT p.ProductKey, p.ProductName,
       SUM((p.ProductSalesPrice - p.ProductActualCost) * FP.Quantity) AS Profit
FROM Fact_ProductSales FP JOIN Dim_Product p ON FP.ProductID = p.ProductKey
JOIN Dim_Date dd ON dd.Datekey = FP.SalesDateKey WHERE dd.YEAR = '2015'
GROUP BY FP.ProductID ORDER BY Profit DESC LIMIT 1;
```

	ProductKey	ProductName	Profit
▶	2	Jasmine Rice 5kg	102.00

Question 5. In which calendar quarter in 2016 did the Boulder store show the highest revenue?

Quary >

```
SELECT ds.StoreID, ds.StoreName, ds.City, sum(fp.SalesPrice* Quantity) as TotalRevenue, dd.QUARTER
FROM Dim_Store ds JOIN Fact_ProductSales fp ON ds.StoreID = fp.StoreID
JOIN Dim_Date dd ON dd.DateKey = fp.SalesDateKey
WHERE ds.City = 'Boulder' AND dd.Year = '2016'
GROUP BY dd.QUARTER, fp.StoreID ORDER BY TotalRevenue DESC LIMIT 1;
```

	StoreID	StoreName	City	TotalRevenue	QUARTER
▶	1	ValueMart Boulder	Boulder	2259.50	3