# *Homework 5*

Muntaha Pasha

**use sales_dw;**

/*1*/

**Q: Which salesperson produced the most total revenue for this organization during 2012?**

*A: Julian Brand.*

SELECT fact_productsales.SalesPersonID, dim_salesperson.SalesPersonName, sum(fact_productsales.SalesPrice * fact_productsales.Quantity) as TotalRevenue2012 from Fact_ProductSales JOIN Dim_SalesPerson ON dim_salesperson.SalesPersonID = fact_productsales.SalesPersonID JOIN Dim_date ON fact_productsales.SalesDateKey = dim_date.DateKey where dim_date.year='2012' GROUP BY fact_productsales.SalesPersonID ORDER BY TotalRevenue2012 DESC LIMIT 1;

| SalesPersonID | SalesPersonName | TotalRevenue2012 |
|---|---|---|
| 4 | Julian Brand | 2885.50 |

/*2*/

**Q: Which customer's revenue increased the most from 2012 to 2013?**

*A: Aldous Huxley*

SELECT dc.CustomerID, dc.CustomerName, SUM(FP.SalesPrice * FP.Quantity) as TotalRevenue 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 TotalRevenue DESC LIMIT 1;

| CustomerID | CustomerName | TotalRevenue |
|---|---|---|
| 4 | Aldous Huxley | 5822.00 |

/*3*/

**Q: Rank all stores by their total revenue for each year represented in the data warehouse.**

*A: See Table Below*

SELECT ds.StoreID, ds.StoreName, dd.YEAR, SUM(FP.SalesPrice * FP.Quantity) AS TotalRevenue 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, TotalRevenue DESC;

| StoreID | StoreName | YEAR | TotalRevenue |
|---|---|---|---|
| 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 |

/*4*/

**Q: Which product yielded the highest profit in 2015?**

*A: Jasmine Rice*

```
SELECT dp.productkey, dp.productname, SUM((dp.productsalesprice-
dp.productactualcost)*fp.quantity) as Profit from dim_product dp join
Fact_ProductSales FP ON dp.productkey = FP.productID JOIN Dim_Date dd ON
FP.SalesDatekey = dd.DateKey where dd.YEAR='2015' group by fp.productID order
by Profit desc limit 1;
```

| productkey | productname | Profit |
|---|---|---|
| 2 | Jasmine Rice 5kg | 102.00 |

/*5*/

**Q: In which calendar quarter in 2016 did the Boulder store show the highest revenue?**

*A: Quarter 3*

```
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 |