

1.)

/*Query #1 DONE*/

```
SELECT SalesPersonID FROM Fact_ProductSales fp
JOIN Dim_Date AS dd ON fp.SalesdateKey = dd.DateKey
WHERE fp.SalesPrice*fp.Quantity = (SELECT MAX(SalesPrice*Quantity) FROM
Fact_ProductSales AS fp JOIN Dim_Date AS dd ON fp.SalesdateKey = dd.DateKey AND
dd.YEAR = "2012")
AND dd.YEAR = "2012";
```

SalesPersonID

'5'

'4'

SalesPerson IDs for most revenue in 2012.

2.)

/*Query #2*/

/*Finds 2012 first*/

```
SELECT c.CustomerID AS Customer, SUM(fp.SalesPrice*fp.Quantity) AS Revenue FROM
Dim_Customer c
JOIN Fact_ProductSales AS fp on fp.CustomerID = c.CustomerID
JOIN Dim_Date AS dd ON fp.SalesdateKey = dd.DateKey
WHERE dd.YEAR = "2012"
GROUP BY c.CustomerID;
```

/*Finds 2013 next*/

```
SELECT c.CustomerID AS Customer, SUM(fp.SalesPrice*fp.Quantity) AS Revenue FROM
Dim_Customer c
JOIN Fact_ProductSales AS fp on fp.CustomerID = c.CustomerID
JOIN Dim_Date AS dd ON fp.SalesdateKey = dd.DateKey
WHERE dd.YEAR = "2013"
GROUP BY c.CustomerID;
```

2012

Customer, Revenue

'1', '1162.50'

'2', '1898.00'

'3', '1565.50'
'4', '4970.00'
'5', '1153.50'

2013

Customer, Revenue

'1', '1423.00'
'2', '361.00'
'3', '342.00'
'4', '852.00'

Customer 1 had the highest revenue increase from 2012 to 2013.

3.)

/*Query #3 DONE*/

```
SELECT fp.StoreID, SUM(fp.SalesPrice*fp.Quantity) AS StoreRevenue
FROM Fact_ProductSales fp
JOIN Dim_Date AS dd ON fp.SalesDateKey = dd.DateKey WHERE dd.YEAR = "2010"
AND dd.YEAR = "2010"
GROUP BY fp.StoreID
ORDER BY StoreRevenue DESC;
```

```
SELECT fp.StoreID, SUM(fp.SalesPrice*fp.Quantity) AS StoreRevenue
FROM Fact_ProductSales fp
JOIN Dim_Date AS dd ON fp.SalesDateKey = dd.DateKey WHERE dd.YEAR = "2011"
AND dd.YEAR = "2011"
GROUP BY fp.StoreID
ORDER BY StoreRevenue DESC;
```

```
SELECT fp.StoreID, SUM(fp.SalesPrice*fp.Quantity) AS StoreRevenue
FROM Fact_ProductSales fp
JOIN Dim_Date AS dd ON fp.SalesDateKey = dd.DateKey WHERE dd.YEAR = "2012"
AND dd.YEAR = "2012"
GROUP BY fp.StoreID
ORDER BY StoreRevenue DESC;
```

```
SELECT fp.StoreID, SUM(fp.SalesPrice*fp.Quantity) AS StoreRevenue
```

```

FROM Fact_ProductSales fp
JOIN Dim_Date AS dd ON fp.SalesDateKey = dd.DateKey WHERE dd.YEAR = "2013"
AND dd.YEAR = "2013"
GROUP BY fp.StoreID
ORDER BY StoreRevenue DESC;

```

Store Rankings are as follows:

2010

StoreID, StoreRevenue

'1', '5975.50'

'2', '1231.00'

'3', '1123.00'

2011

StoreID, StoreRevenue

'1', '7336.00'

'2', '2168.00'

'3', '1737.50'

2012

StoreID, StoreRevenue

'1', '7286.00'

'2', '1898.00'

'3', '1565.50'

2013

StoreID, StoreRevenue

'1', '2275.00'

'2', '361.00'

'3', '342.00'

4.)

/*Query #4: Here we order the total profit from each product and then select the first entry*/

```

SELECT ProductID, SUM((SalesPrice-ProductCost)*Quantity) AS Profit

```

```

FROM Fact_ProductSales AS fp

```

```

JOIN Dim_Date AS dd

```

```

ON fp.SalesDateKey = dd.DateKey

```

```
WHERE YEAR = "2015"  
GROUP BY ProductID  
ORDER BY Profit DESC  
LIMIT 1;
```

```
ProductID, Profit  
'2', '102.00'
```

The product that has ID "2" returned the highest profit in the year 2015.

5.)

```
/*Query #5*/  
SELECT SUM(SalesPrice*Quantity) AS Revenue, QUARTER  
FROM fact_productsales AS f  
JOIN Dim_Date AS d  
ON f.SalesDateKey = d.DateKey WHERE  
YEAR = 2016  
AND StoreID = 1  
GROUP BY QUARTER  
ORDER BY Revenue DESC  
limit 1;
```

```
Revenue, QUARTER  
'2259.50', '3'
```

The Boulder store(ID = 1) had the highest revenue in the third quarter of 2016.