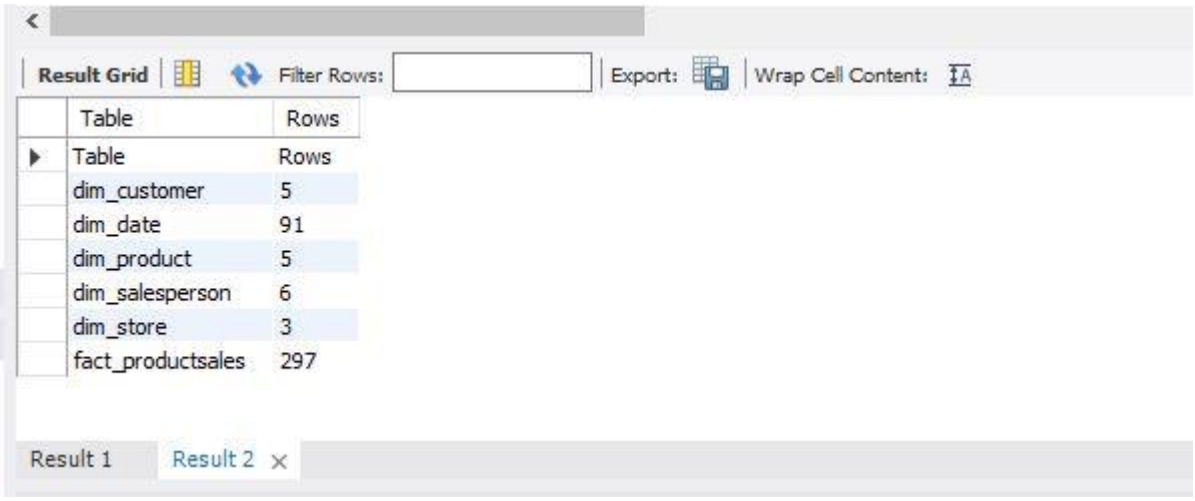
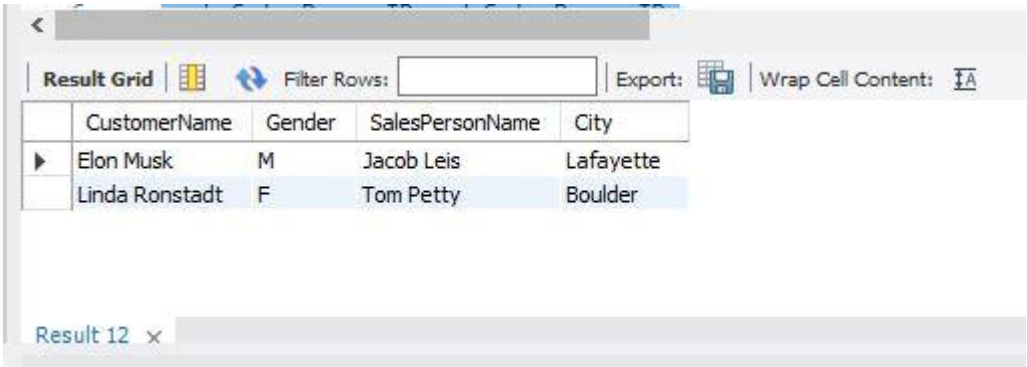
Home Work 4
Data Ware House

Checking the count of Tables:



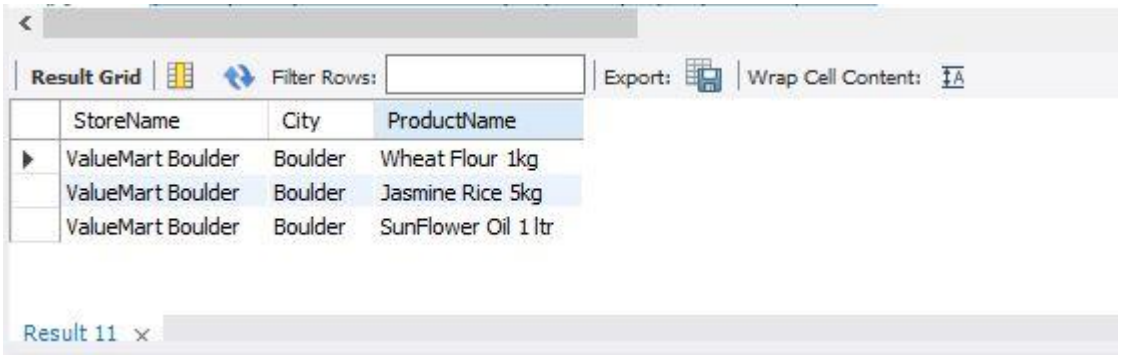
Query 1

```
select a.CustomerName, a.Gender, d.SalesPersonName, d.City
from dim_customer as a join fact_productsales as b
on a.CustomerID=b.CustomerID join dim_date as c on
b.SalesDateKey=c.DateKey join dim_salesperson as d
on b.SalesPersonID = d.SalesPersonID
where c.YEAR = "2015" and c.MONTH = "9"
and b.SalesPrice > 20 and b.Quantity > 8
group by b.ProductID
;
```



Query 2

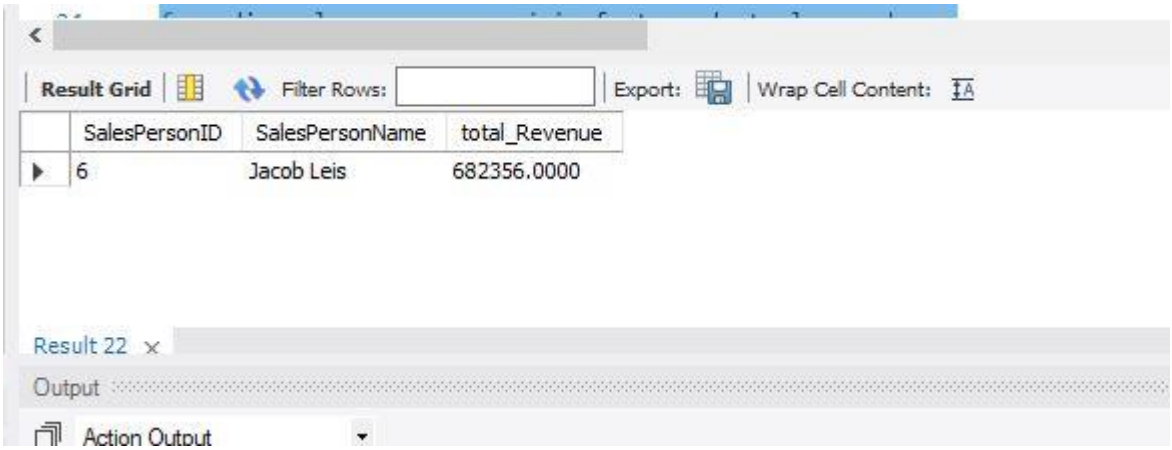
```
select a.StoreName , a.City , c.ProductName
from dim_store as a join fact_productsales as b on
a.StoreID = b.StoreID join dim_product as c on
b.ProductID = c.ProductKey join dim_date as d on
b.SalesDateKey = d.DateKey
where d.MONTH = "3" and d.YEAR= "2017"
and a.City="Boulder" and b.ProductCost < 50
;
```



StoreName	City	ProductName
ValueMart Boulder	Boulder	Wheat Flour 1kg
ValueMart Boulder	Boulder	Jasmine Rice 5kg
ValueMart Boulder	Boulder	SunFlower Oil 1 ltr

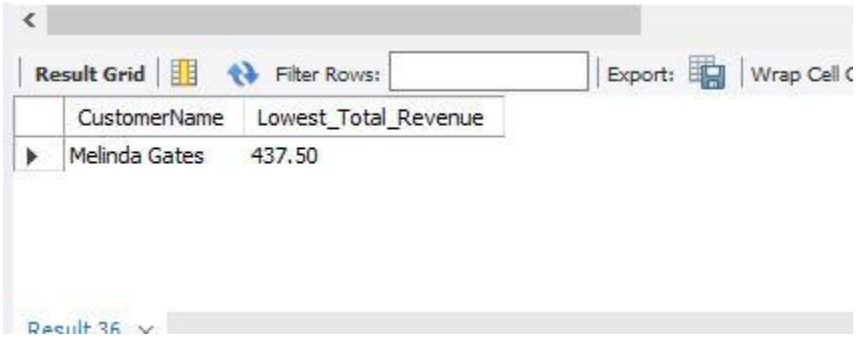
Query 3:

```
select a.SalesPersonID , a.SalesPersonName , (sum(b.ProductCost) * sum(c.ProductSalesPrice)) as
total_Revenue
from dim_salesperson as a join fact_productsales as b on
a.SalesPersonID = b.SalesPersonID join dim_product as c on
b.ProductID = c.ProductKey join dim_date as d on
b.SalesDateKey = d.DateKey
where d.YEAR = "2017"
order by total_Revenue desc
limit 2
;
```



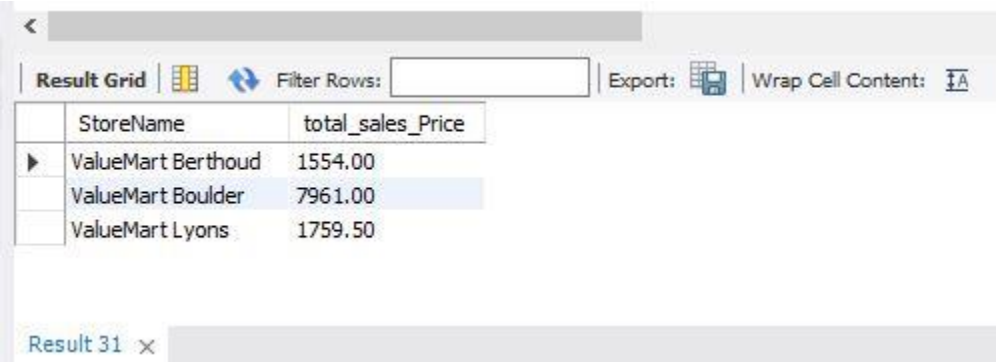
Query 4:

```
select a.CustomerName , sum(b.SalesPrice * b.Quantity) as Lowest_Total_Revenue
from dim_customer as a join fact_productsales as b on
a.CustomerID = b.CustomerID join dim_date as c on
b.SalesDateKey = c.DateKey
where c.Year = "2017"
group by a.CustomerName
order by Lowest_Total_Revenue asc
limit 1
;
```



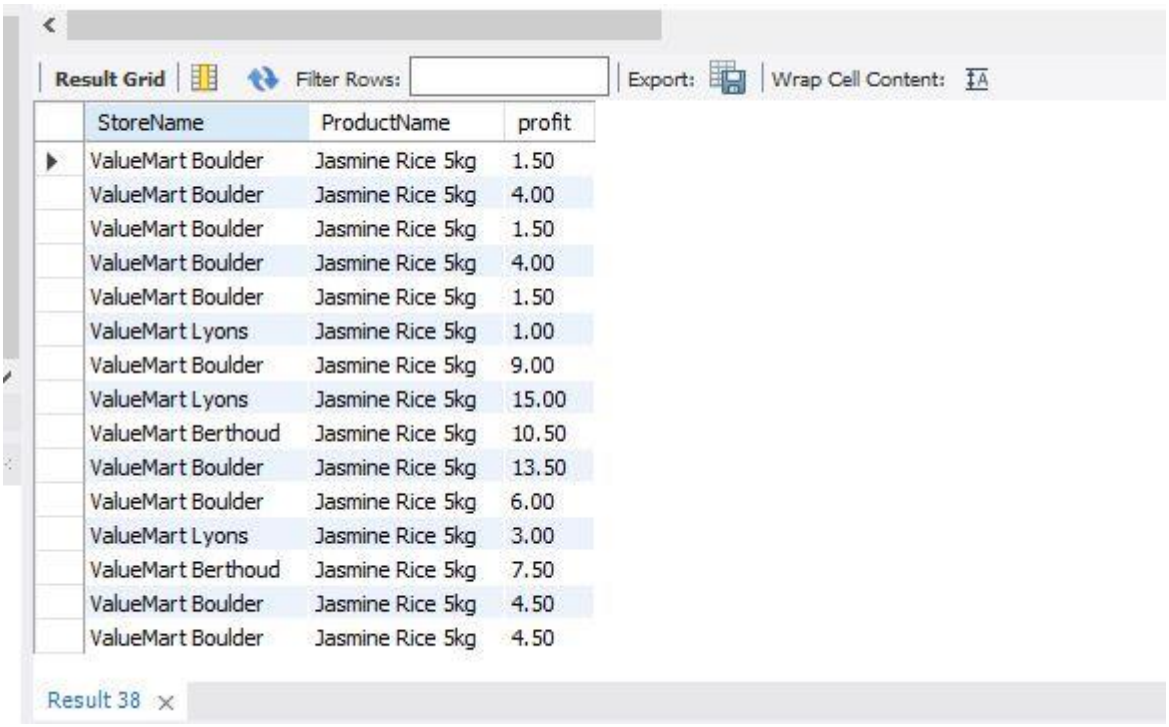
Query 5:

```
select a.StoreName , sum(b.SalesPrice) as total_sales_Price
from dim_store as a join fact_productsales as b on
a.StoreID = b.StoreID join dim_date as c on
b.SalesDateKey = c.DateKey
where c.YEAR >= "2010" and c.YEAR <= "2017"
group by a.StoreName
order by a.StoreName asc
;
```



Query 6:

```
select a.StoreName, c.ProductName , (b.SalesPrice * b.Quantity) - (b.ProductCost * b.Quantity)  as profit
from dim_store as a join fact_productsales as b on
a.StoreID = b.StoreID join dim_product as c on
c.ProductKey = b.ProductID join dim_date as d on
b.SalesDateKey = d.DateKey
where c.ProductName="Jasmine Rice 5kg" and d.YEAR="2010"
;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

StoreName	ProductName	profit
ValueMart Boulder	Jasmine Rice 5kg	1.50
ValueMart Boulder	Jasmine Rice 5kg	4.00
ValueMart Boulder	Jasmine Rice 5kg	1.50
ValueMart Boulder	Jasmine Rice 5kg	4.00
ValueMart Boulder	Jasmine Rice 5kg	1.50
ValueMart Lyons	Jasmine Rice 5kg	1.00
ValueMart Boulder	Jasmine Rice 5kg	9.00
ValueMart Lyons	Jasmine Rice 5kg	15.00
ValueMart Berthoud	Jasmine Rice 5kg	10.50
ValueMart Boulder	Jasmine Rice 5kg	13.50
ValueMart Boulder	Jasmine Rice 5kg	6.00
ValueMart Lyons	Jasmine Rice 5kg	3.00
ValueMart Berthoud	Jasmine Rice 5kg	7.50
ValueMart Boulder	Jasmine Rice 5kg	4.50
ValueMart Boulder	Jasmine Rice 5kg	4.50

Result 38

Query 7:

```
select a.StoreName,c.QUARTER,c.YEAR , (b.SalesPrice * b.Quantity) as Total_Revenue
from dim_store as a join fact_productsales as b on
a.StoreID = b.StoreID join dim_date as c on
c.DateKey = b.SalesDateKey
where c.YEAR="2016" and a.StoreName="ValueMart Boulder"
group by c.QUARTER
order by c.QUARTER
;
```

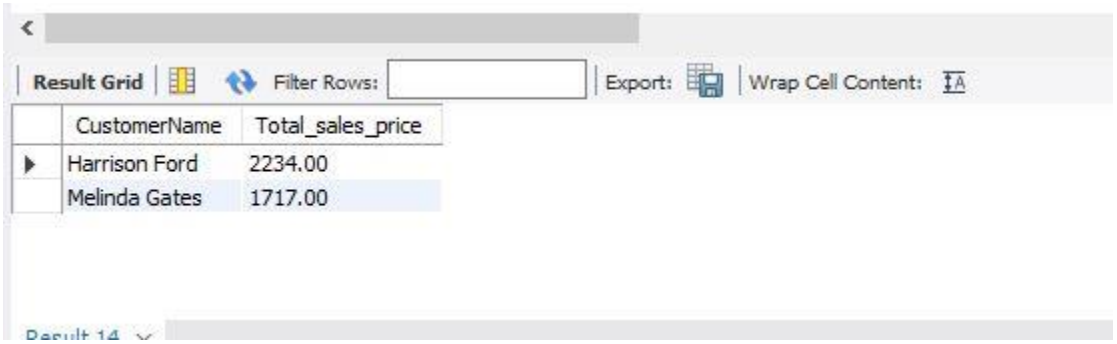
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

StoreName	QUARTER	YEAR	Total_Revenue
ValueMart Boulder	1	2016	39.00
ValueMart Boulder	2	2016	192.00
ValueMart Boulder	3	2016	24.00
ValueMart Boulder	4	2016	19.50

Result 9 | Result 10

Query 8:

```
select a.CustomerName , sum(b.SalesPrice) as Total_sales_price
from dim_customer as a join fact_productsales as b on
a.CustomerID = b.CustomerID
where a.CustomerName="Melinda Gates" or a.CustomerName="Harrison Ford"
group by a.CustomerName
;
```



CustomerName	Total_sales_price
Harrison Ford	2234.00
Melinda Gates	1717.00

Query 9:

```
select a.StoreName,b.SalesPrice,d.CustomerName
from dim_store as a join fact_productsales as b on
a.StoreID=b.StoreID join dim_date as c on
b.SalesDateKey = c.DateKey join dim_customer as d on
b.customerId = d.customerId
where c.DAYOFMONTH="12" and c.MONTH="3" and c.YEAR="2017"
;
```

StoreName	SalesPrice	CustomerName
ValueMart Boulder	6.50	Aldous Huxley
ValueMart Boulder	24.00	Aldous Huxley
ValueMart Boulder	43.50	Aldous Huxley

Result 16

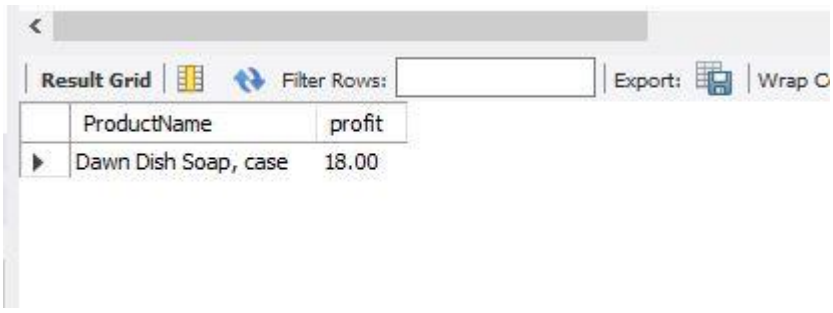
Query 10:

```
select a.SalesPersonName,sum(b.SalesPrice*b.Quantity) as Highest_Revenue
from dim_salesperson as a join fact_productsales as b on
a.SalesPersonID=b.SalesPersonID
group by a.SalesPersonName
order by Highest_Revenue desc
limit 1
;
```

SalesPersonName	Highest_Revenue
Julian Brand	21164.50

Query 11:

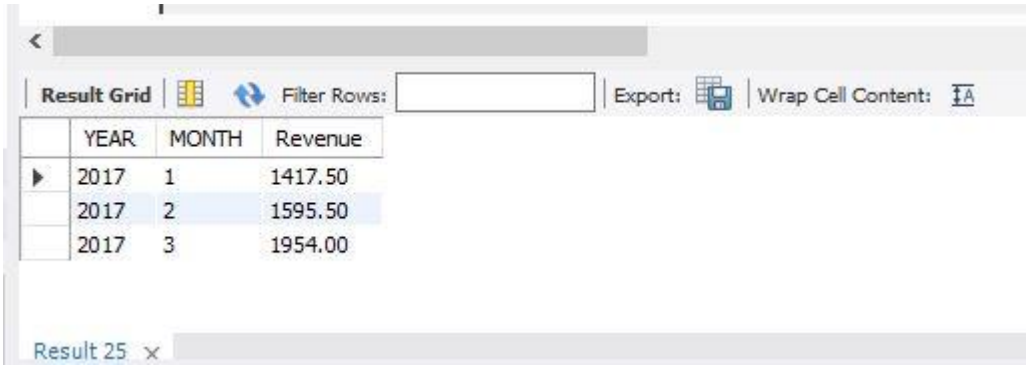
```
select a.ProductName, (b.SalesPrice * b.Quantity) - (b.ProductCost * b.Quantity)  as profit
from dim_product as a join fact_productsales as b on
a.ProductKey = b.ProductID
group by ProductName
order by profit desc
limit 1
;
```



ProductName	profit
Dawn Dish Soap, case	18.00

Query 12:

```
select a.YEAR,a.MONTH, sum(b.SalesPrice * b.Quantity) as Revenue

from dim_date as a join fact_productsales as b on

a.DateKey = b.SalesDateKey

where (a.MONTH='1' or a.MONTH='2' or a.MONTH='3') and a.YEAR="2017"

group by a.MONTH

;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

YEAR	MONTH	Revenue
2017	1	1417.50
2017	2	1595.50
2017	3	1954.00

Result 25

Query 13:

```
select a.ProductName , round(AVG(b.ProductCost),2) as Average_Product_cost ,
round(AVG(b.SalesPrice),2) as Average_sales_price

from dim_product as a join fact_productsales as b on

a.ProductKey = b.ProductID join dim_date as c on

b.SalesDateKey = c.DateKey

where c.YEAR = "2017"

group by a.ProductName

;
```

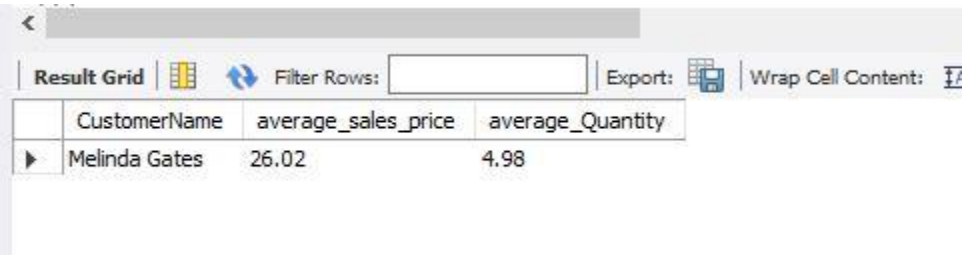
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ProductName	Average_Product_cost	Average_sales_price
Wheat Flour 1kg	5.50	6.50
Jasmine Rice 5kg	22.50	24.00
SunFlower Oil 1 ltr	42.00	43.50
Dawn Dish Soap, case	18.00	20.00
Tide Laundry Detergent 1kg case	135.00	139.00

Result 29

Query 14:

```
select a.CustomerName, round(avg(b.SalesPrice),2) as average_sales_price , round(avg(b.Quantity),2) as average_Quantity

from dim_customer as a join fact_productsales as b on

a.CustomerID = b.CustomerID

where a.CustomerName="Melinda Gates"

group by a.CustomerName

;
```



CustomerName	average_sales_price	average_Quantity
Melinda Gates	26.02	4.98

Query 15:

```
select a.City , Max(b.SalesPrice) as Maximum_sales_price , Min(b.SalesPrice) as Minimum_sales_price

from dim_store as a join fact_productsales as b on

a.StoreID = b.StoreID

where a.City = "Boulder"

group by a.City

;
```

City	Maximum_sales_price	Minimum_sales_price
Boulder	139.00	6.50