**Capstone Project SQL Unicorn - Naama Levy**

**1.How many Customers do we have in the data?**

SELECT count(customer\_id) as number\_of\_customers

from customers

**Answer: 795**

**2.What was the city with the most profit for the company in 2015 and how much was it?**

SELECT shipping\_city, Sum(order\_profits) as profit

FROM orders AS o

JOIN order\_details as od on o.order\_id = od.order\_id

WHERE order\_date LIKE '%2015'

GROUP by shipping\_city

ORDER by profit DESC;

**Answer : New York City 14753**

**3.How many different cities do we have in the data?**

SELECT count(DISTINCT shipping\_city) AS number\_of\_cities

from orders

**Answer: 531 cities**

4. **Show the total spent by customers from low to high.**

SELECT customers.customer\_id, SUM(order\_sales) as total

FROM customers

JOIN orders ON customers.customer\_id = orders.customer\_id

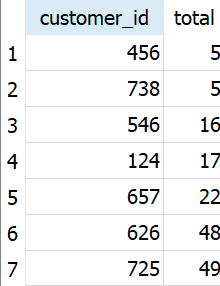
JOIN order\_details ON orders.order\_id = order\_details.order\_id

GROUP BY customers.customer\_id

ORDER BY 2

LIMIT 7

Answer:



**5.What is the most profitable City in the State of Tennessee?**

SELECT shipping\_city , sum (order\_profits) as profits

FROM orders AS o

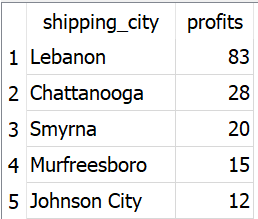
JOIN order\_details as od on o.order\_id = od.order\_id

WHERE shipping\_state = 'Tennessee'

GROUP by 1

Order by 2 DESC

LIMIT 5 ;

**Answer : **

**6.What’s the average annual profit for that city across all years in that city?**

SELECT avg(order\_profits)

FROM orders as o

JOIN order\_details as od

ON o.order\_id=od.order\_id

WHERE shipping\_city='Lebanon'

**Answer: 27.6666666666667**

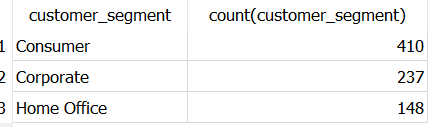
**7. What is the distribution of customer types in the data?**

SELECT customer\_segment , count(customer\_segment)

FROM customers

group by 1

**Answer:**



**8. What’s the most profitable product category on average in Iowa across all years?**

SELECT avg(order\_profits),product\_category, shipping\_state

FROM orders as o

JOIN order\_details as od

ON o.order\_id=od.order\_id

JOIN product as p

on od.product\_id=p.product\_id

WHERE shipping\_state='Iowa'

GROUP by 2

ORDER by 1 DESC

**Answer: Furniture**

**9. What is the most popular product in that category across all states in 2016?**

SELECT p.product\_name, sum(od.quantity) as total\_quantity

FROM orders AS o

JOIN order\_details as od on o.order\_id = od.order\_id

JOIN product as p on od.product\_id = p.product\_id

WHERE p.product\_category = 'Furniture' AND substr(order\_date, -4)= '2016'

group by p.product\_name

Order by total\_quantity DESC

**Answer: Global Push Button Manager's Chair, Indigo**

**10. Which customer got the most discount in the data? (in total amount)**

select cus.customer\_id ,cus.customer\_name

, sum((od.order\_sales / (1-od.order\_discount )) - od.order\_sales) as total\_discount\_amount

from order\_details as od

join orders as o

on o.order\_id=od.order\_id

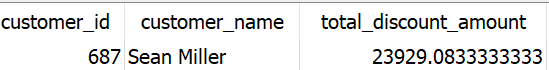
join customers as cus

on cus.customer\_id= o.customer\_id

group by 2

order by 3 desc

limit 1

**Answer:** 

**11. How widely did monthly profits vary in 2018?**

WITH monthly\_profit as (SELECT CAST(substr(o.order\_date, 1 ,(instr(o.order\_date, '/') -1)) as int) month , sum(od.order\_profits)as profit

from order\_details od

JOIN orders o on od.order\_id = o.order\_id

where substr(order\_date , -4) = '2018'

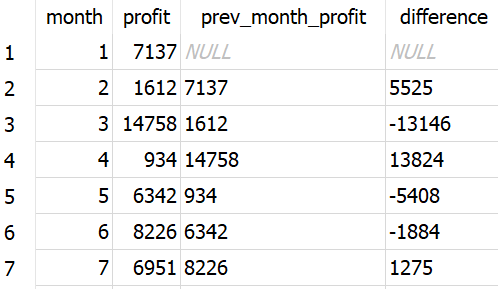
group by substr(o.order\_date ,1 , (instr(o.order\_date , '/')-1))

order by month , sum(od.order\_profits) DESC)

select month, profit ,lag(profit, 1) OVER (order by month ) prev\_month\_profit , profit - (lag(profit,1) over (order by month)) difference

from monthly\_profit

order by 4

**Answer:**

**12.Which order was the highest in 2015?**

SELECT od.order\_sales as totalsales, shipping\_date, od.order\_id

FROM order\_details AS od

JOIN orders as o on od.order\_id = o.order\_id

WHERE shipping\_date LIKE '%2015'

ORDER by 1 DESC;

**Answer : CA-2015-145317**

**13.What was the rank of each city in the East region in 2015?**

SELECT sum(quantity ) as sq, shipping\_city, shipping\_region,

ROW\_NUMBER() OVER( ORDER BY quantity) AS rank

FROM order\_details AS od

JOIN orders as o on od.order\_id = o.order\_id

WHERE shipping\_region = 'East' and shipping\_date like '%2015'

GROUP by 2

ORDER by 1 desc

**14.Join all DB tables into one dataset that includes all unique columns and download it as a csv file. In the second part of the project, you're gonna work with this one table.**

SELECT c.customer\_id, c.customer\_name, c.customer\_segment,o.order\_id, o.order\_date,

o.shipping\_city, o.shipping\_country, o.shipping\_state, o.shipping\_region, o.shipping\_postal\_code, o.shipping\_date, o.shipping\_mode,

od.order\_details\_id, od.product\_id, od.quantity, od.order\_discount, od.order\_profits, od.order\_profit\_ratio, od.order\_sales,

p.product\_name, p.product\_category, p.product\_subcategory, p.product\_manufacturer

FROM customers c JOIN orders o on c.customer\_id = o.customer\_id

JOIN order\_details od on od.order\_id = o.order\_id

JOIN product p on p.product\_id = od.product\_id;

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4. **Show the total spent by customers from low to high.**
5. **What is the most profitable City in the State of Tennessee?**
6. **What’s the average annual profit for that city across all years in that city?**
7. **What is the distribution of customer types in the data?**
8. **What’s the most profitable product category on average in Iowa across all years?**
9. **What is the most popular product in that category across all states in 2016?**
10. **Which customer got the most discount in the data? (in total amount)**
11. **How widely did monthly profits vary in 2018?**
12. **Which order was the highest in 2015?**
13. **What was the rank of each city in the East region in 2015?**
14. **Join all DB tables into one dataset that includes all unique columns and download it as a csv file. In the second part of the project, you're gonna work with this one table.**