- 1. How many Customers do we have in the data?
- 2. What was the city with the most profit for the company in 2015 and how much was it?
- 3. How many different cities do we have in the data?
- 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?

```
1a. 795
1b. select count(*)
from customers
2a. nyc,14753
2b. select orders.shipping city, SUM(order details.order profits) as profit,
substr(orders.order date,-4,4) as year
from orders
ioin order details
on orders.order id = order details.order id
where substr(orders.order date,-4,4) like '%2015%'
group by orders.shipping_city
order by profit DESC3a.531
3b. select COUNT(distinct orders.shipping_city)
from orders
4a.
4b. select SUM(order_details.order_sales) AS total_sum, customers.customer_name
from order details
IOIN orders
on order_details.order_id = orders.order_id
ioin customers
on orders.customer_id = customers.customer_id
group by customers.customer_id
order by total sum
5a. Lebanon has highest profits, franklin has highest profit ratio
5b. select orders.shipping_city, SUM(order_details.order_profits) as profits
from orders
ioin order details
on orders.order_id = order_details.order_id
WHERE orders.shipping_state = 'Tennessee'
group by orders.shipping_city
```

```
order by profits DESC
6a. 16-6, 17-18, 18-59, overall 27.66
6b. select orders.shipping_city, AVG(order_details.order_profits) as profits,
substr(orders.order_date,-4,4) as year
from orders
join order details
on orders.order_id = order_details.order_id
WHERE orders.shipping_city = 'Lebanon'
group by year
7a.410 consumer, 237 corporate, 148 home office
7b. select count(customer_segment), customer_segment
from customers
group by customer_segment
8a. highest profits is furniture, highest ratio is office supplies
8b. select AVG(order details.order profits), AVG(order details.order profit ratio),
product.product_category, orders.shipping_state
from product
join order details
on product.product id = order details.product id
JOIN orders
on order details.order id = orders.order id
WHERE orders.shipping state = 'Iowa'
GROUP BY product_product_category
9a. gold push button managers chair indigo.
9b. select SUM(order_details.quantity) as tot_ord, COUNT(orders.order_id),
product.product name
from product
ioin order details
on product_product_id = order_details.product_id
IOIN orders
on order details.order id = orders.order id
WHERE product_product_category = 'Furniture'
AND order details.order id like '%2016%'
GROUP BY product_product_name
order by tot ord DESC
10a. sean miller, 687, 962.15
10b. select customers.customer_name, customers.customer_id,
SUM(order_details.order_discount) as tot_disc, SUM(order_details.order_sales) as tot_sale,
(SUM(order_details.order_sales)/(1-((SUM(order_details.order_discount)/100))))-
SUM(order details.order sales) as tot diff
from customers
ioin orders
on customers.customer_id = orders.customer_id
join order details
on orders.order_id = order_details.order_id
group by customers.customer_name
```

```
order by tot diff DESC
11a. they vary widely, top month(3) profits as 14758, bottom (4) as 934
11b. select SUBSTR(orders.order_date,1,INSTR(orders.order_date,'/')-1) as month,
SUM(order_details.order_profits) as profits
from orders
join order details
on orders.order_id = order_details.order_id
WHERE orders.order_date like '%2018%'
group by month
order by profits desc
12a. order_id CA-2015-145317, 22638
12b. select MAX(order_sales), order_id
from order details
WHERE order_id like '%2015%'
13a.
13b. select RANK() OVER(order by order_details.quantity) as rank, orders.shipping_city,
orders.shipping_region, SUM(order_details.quantity) as tot_quan
from orders
join order details
on orders.order_id = order_details.order_id
where orders.order_id like '%2015%'
AND orders.shipping region like 'East'
group by orders.shipping city
order by tot_quan DESC14a. select *
from customers
ioin orders
on customers.customer_id = orders.customer_id
JOIN order_details
on orders.order_id = order_details.order_id
JOIN product
on order details.product id = product.product id
```