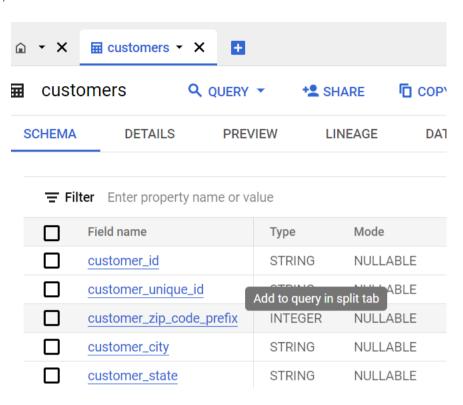
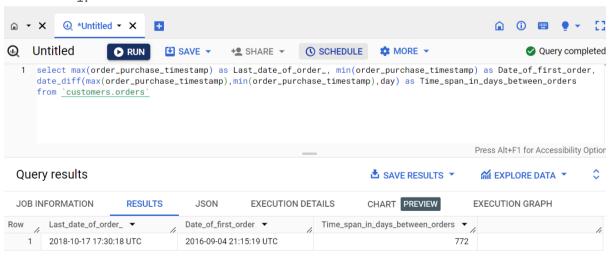
1. Data type of all columns in the "customers" table.

1.



- 2. 2. Get the time range between which the orders were placed.
- 2. select max(order_purchase_timestamp) as Last_date_of_order_,
 min(order_purchase_timestamp) as
 Date_of_first_order, date_diff(max(order_purchase_timestamp), min(order_purcha
 se_timestamp), day) as Time_span_in_days_between_orders from
 `customers.orders`
 1.



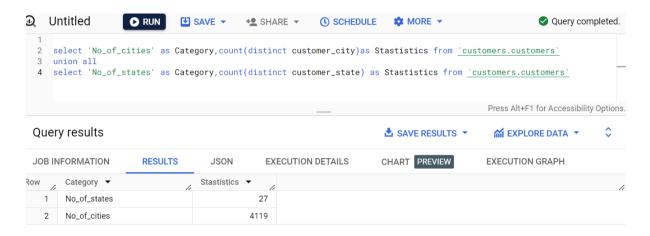
select customer_city, count(customer_city) as
Total_no_of_cities_based_on_order_placed, customer_state, count

(customer_state) as Total_no_of_states_based_on_order_placed from `customers.customers` where customer_id in (select customer_id from `customers.orders` where order_purchase_timestamp between '2017-11-25 11:10:33' and '2018-01-13 15:41:34') group by customer_city, customer_state Qn:

Qy: select 'No_of_cities' as Category, count(distinct
customer_city) as Stastistics from `customers.customers`

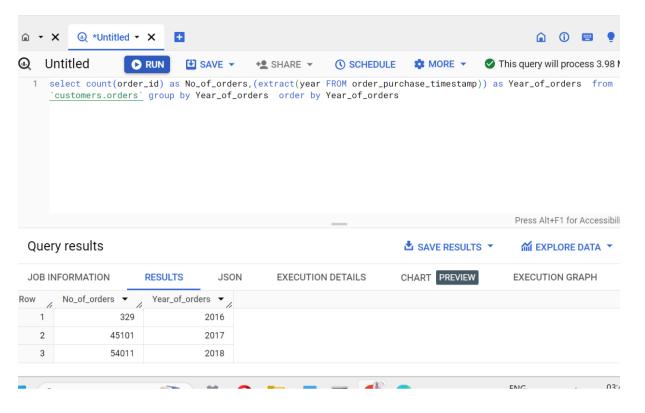
union all

select 'No_of_states' as Category,count(distinct
customer_state) as Stastistics from `customers.customers`



2.1

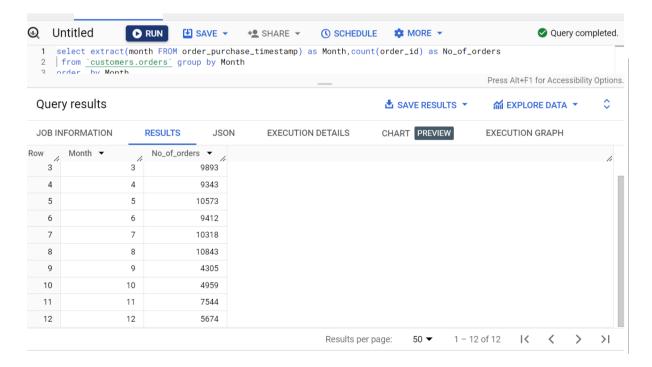
select count(order_id) as No_of_orders,(extract(year FROM
order_purchase_timestamp)) as Year_of_orders from `customers.orders` group by
Year_of_orders order by Year_of_orders



2.2

 ${\tt select\ extract(month\ FROM\ order_purchase_timestamp)\ as\ Month, count(order_id)\ as\ No_of_orders}$

from `customers.orders` group by Month
order by Month



```
2.3
```

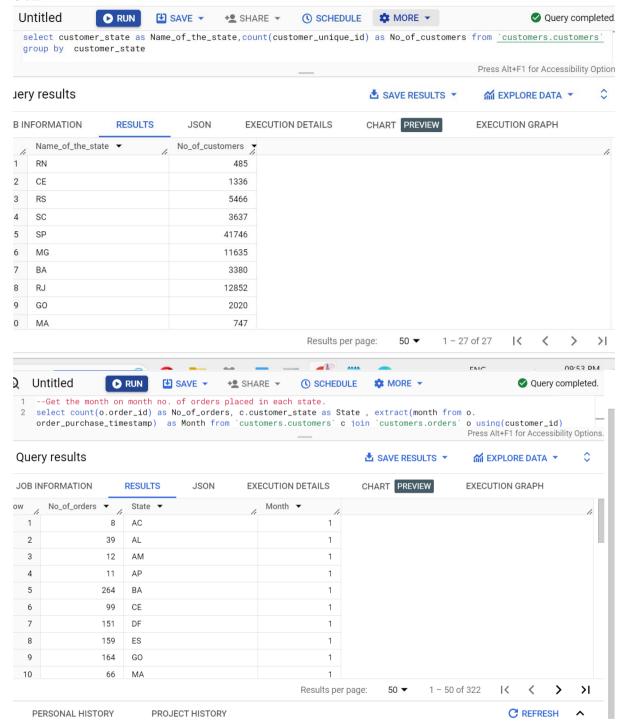
```
select case when (extract(hour FROM order_purchase_timestamp)) between when (extract(hour FROM order_purchase_timestamp)) between 18 and 23 when (extract(hour FROM order_purchase_timestamp)) between 6 and 11 th when (extract(hour FROM order_purchase_timestamp)) between 12 and 17 to end as Time_of_the_day_when_orders_were_placed, count(order_id) as No_o group by Time_of_the_day_when_orders_were_placed order by No_of_orders desc
```

uery results



OB IN	IFORMATION	RESULTS	JSON	EXECUTION DETAILS	CH
11	Time_of_the_day	_when_orders_were	_placed 🔻	No_of_orders_placed ▼	
1	Afternoon			38361	
2	Night			34100	
3	Morning			22240	
4	Dawn			4740	

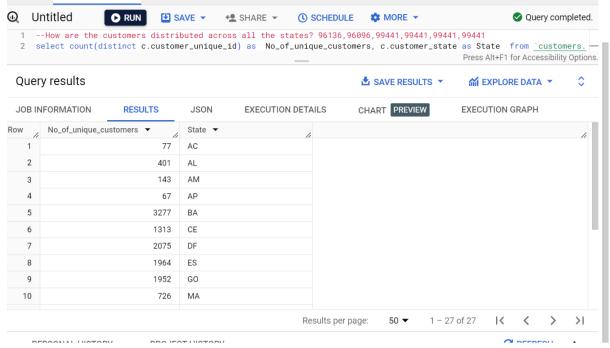
3.2



3:2

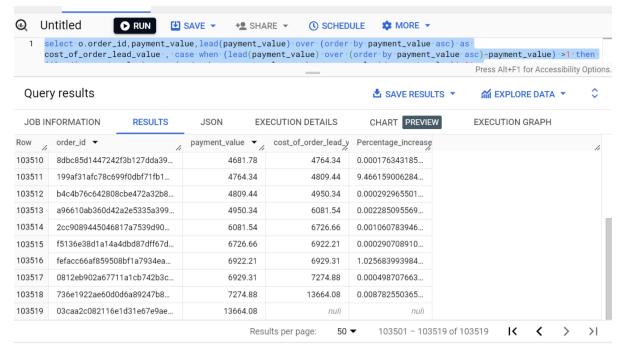
```
How are the customers distributed across all the states? 96136,96096,99441,99441,99441
```

```
select count(distinct c.customer_unique_id) as No_of_unique_customers,
c.customer_state as State from `customers.customers` as c join `customers.orders`
as o on c.customer_id=o.customer_id group by c.customer_state order by
c.customer_state
```

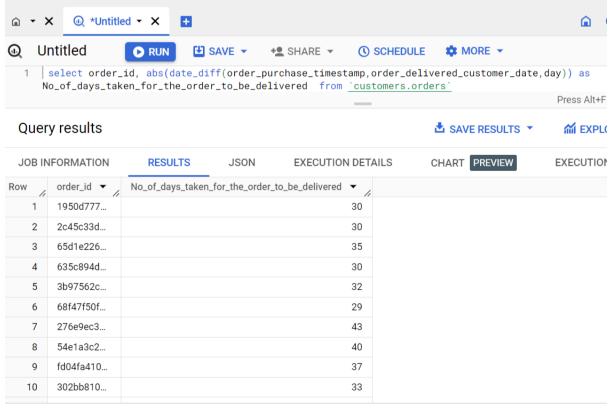


4:1

```
select o.order_id, payment_value, lead(payment_value) over (order by payment_value
asc) as cost_of_order_lead_value , case when (lead(payment_value) over (order by
payment_value asc)-payment_value) >1 then ((lead(payment_value) over (order by
payment_value asc)-payment_value)/payment_value)*.01
when (lead(payment_value) over (order by payment_value asc)-payment_value) =0 then
0
when payment_value=0 then 0
else -((lead(payment_value) over (order by payment_value asc)-
payment_value)/payment_value)*.01 end as Percentage_increase from
`customers.payments` p join `customers.orders` o on o.order_id=p.order_id where
o.order_purchase_timestamp between '2017-01-01' and '2018-08-31' order by
payment_value, cost_of_order_lead_value
```

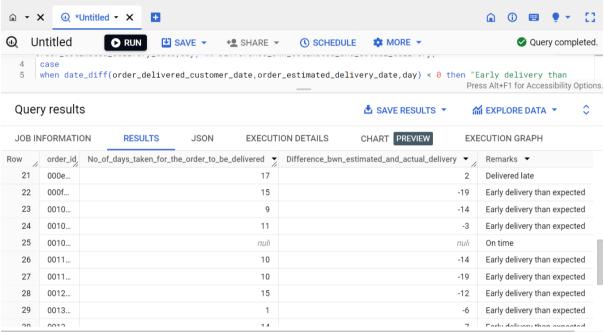


`customers.orders`

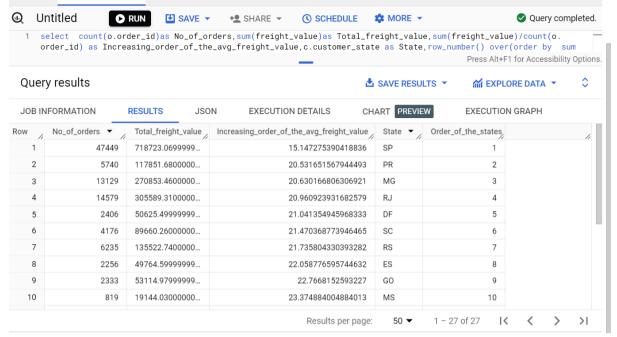


14

```
5:1
select
order_id, date_diff(order_delivered_customer_date, order_purchase_timestamp, day) as
No_of_days_taken_for_the_order_to_be_delivered
, date_diff(order_delivered_customer_date, order_estimated_delivery_date, day) as
Difference_bwn_estimated_and_actual_delivery,
    case
    when date_diff(order_delivered_customer_date, order_estimated_delivery_date, day) <
0 then "Early delivery than expected"
    when date_diff(order_delivered_customer_date, order_estimated_delivery_date, day) >
0 then "Delivered late"
else
    "On time"
end as Remarks from `customers.orders` order by order_id
```

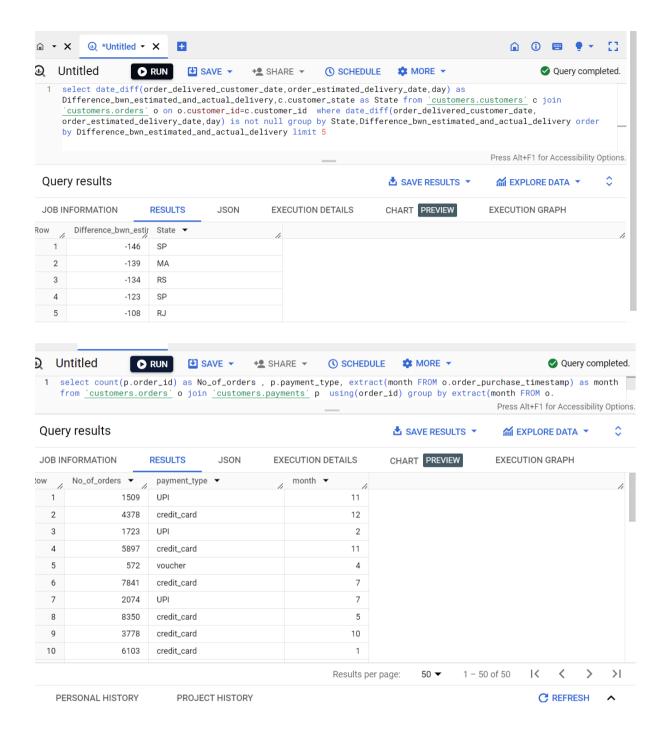


```
5:2select count(o.order_id)as No_of_orders,sum(freight_value)as
Total_freight_value,sum(freight_value)/count(o.order_id) as
Increasing_order_of_the_avg_freight_value,c.customer_state as State,row_number()
over(order by sum(freight_value)/count(o.order_id)) as Order_of_the_states from
`customers.order_items` as i join `customers.orders` as o on i.order_id =o.order_id
join `customers.customers` as c on c.customer_id=o.customer_id group by
c.customer_state
```

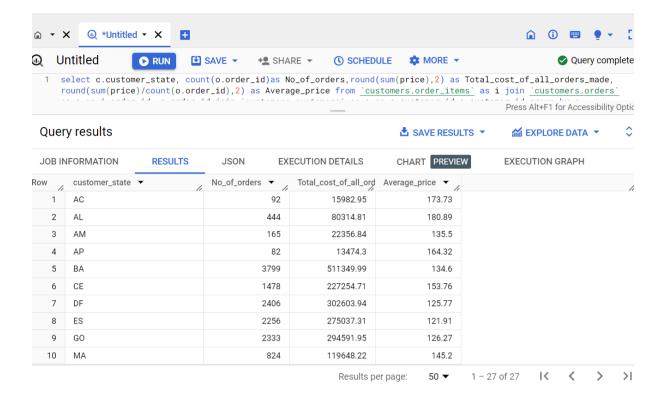


1. Find the month on month no. of orders placed using different payment types.

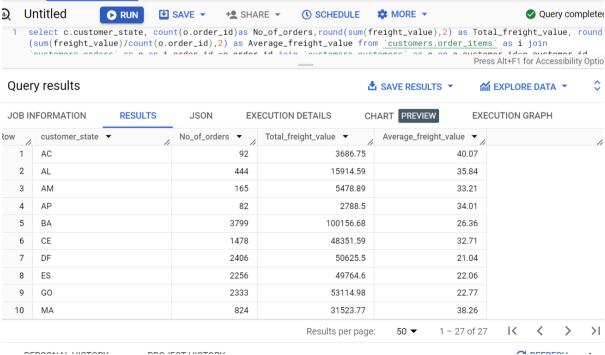
```
select count(p.order_id) as No_of_orders , p.payment_type,
extract(month FROM o.order_purchase_timestamp) as month from
`customers.orders` o join `customers.payments`
   using(order_id) group by extract(month FROM
o.order_purchase_timestamp),p.payment_type
--select count(p.order_id) as No_of_orders, p.payment_type,
FORMAT_date("%B",o.order_purchase_timestamp) as Month from
`customers.orders` o join `customers.payments`
   using(order_id) group
by FORMAT_date("%B",o.order_purchase_timestamp),p.
payment_type order by order_purchase_timestamp
select date_diff(order_delivered_customer_date,order_estimated_delivery_date,day)
as Difference_bwn_estimated_and_actual_delivery,c.customer_state as State from
`customers.customers` c join `customers.orders` o on
o.customer_id=c.customer_id where
date_diff(order_delivered_customer_date,order_estimated_delivery_date,day) is not
null group by State, Difference_bwn_estimated_and_actual_delivery order by
Difference_bwn_estimated_and_actual_delivery limit 5
5:3 select count(o.order_id)
Orders,c.customer_state,o.order_delivered_customer_date
, date_diff(o.order_delivered_customer_date,order_purchase_timestamp,day) as
Delivery_time, sum(date_diff(o.order_delivered_customer_date,order_purchase_timestam
p,day))/count(o.order_id) as Average_delivery_time from `customers.customers` c
join `customers.orders` o using(customer_id) group by c.customer_state,
date_diff(o.order_delivered_customer_date,order_purchase_timestamp,day),o.order_del
ivered_customer_date
```



4:2 select c.customer_state, count(o.order_id)as No_of_orders,round(sum(price),2) as Total_cost_of_all_orders_made, round(sum(price)/count(o.order_id),2) as Average_price from `customers.order_items` as i join `customers.orders` as o on i.order_id =o.order_id join `customers.customers` as c on c.customer_id=o.customer_id group by c.customer_state order by c.customer_state



4:3 select c.customer_state, count(o.order_id)as
No_of_orders,round(sum(freight_value),2) as
Total_freight_value,
round(sum(freight_value)/count(o.order_id),2) as
Average_freight_value from `customers.order_items` as i join
`customers.orders` as o on i.order_id =o.order_id join
`customers.customers` as c on c.customer_id=o.customer_id
group by c.customer_state order by c.customer_state

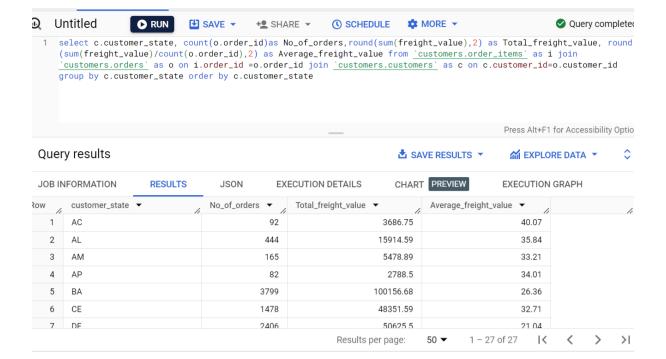


```
4:2select c.customer_state, count(o.order_id)as
No_of_orders,round(sum(price),2) as
Total_cost_of_all_orders_made.
round(sum(price)/count(o.order_id),2) as Average_price from
 `customers.order_items` as i join `customers.orders` as o on
i.order_id =o.order_id join `customers.customers` as c on
c.customer_id=o.customer_id group by c.customer_state order by
c.customer state
select count(o.order_id)as
No_of_orders,round(avg(date_diff(order_delivered_customer_date
 ,order_purchase_timestamp,day)),2) as
Average_delivery_time,customer_state as State from
  `customers.customers` c join `customers.orders` o on
c.customer_id=o.customer_id group by customer_state order by
c.customer_state
① Untitled
                                                         ▶ RUN
                                                                                       SAVE ▼
                                                                                                                                  +2 SHARE ▼
                                                                                                                                                                              () SCHEDULE
                                                                                                                                                                                                                         ☆ MORE ▼
      1-select\ count(o.order\_id) as\ No\_of\_orders, round(avg(date\_diff(order\_delivered\_customer\_date, order\_purchase\_timestamp, and order\_delivered\_customer\_date, order\_purchase\_timestamp, and order\_delivered\_customer\_date, order\_purchase\_timestamp, and order\_delivered\_customer\_date, order\_date, order\_
               day)),2) as Average_delivery_time,customer_state as State from <a href="customers.customers">customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.customers.cus
               on c.customer id=o.customer id group by customer state order by c.customer state
                                                                                                                                                                                                                                                                                 Press Alt+F1 for Accessibility Options
   Query results
                                                                                                                                                                                                                     ▲ SAVE RESULTS ▼
```

JOB INFORMATION		RESULTS	JS0	N	EXECUTION DETAILS	AILS	CHART	PREVIE	EW]	EXECU	TION G	RAPH	Ή	
Row /	No_of_orders ▼	Average	_delivery_tim	State	•	/								/
1	8	1	20.64	AC										
2	413	3	24.04	AL										
3	148	3	25.99	AM										
4	68	3	26.73	AP										
5	3380)	18.87	ВА										
6	1336	5	20.82	CE										
7	2140)	12.51	DF										
8	2033	3	15.33	ES										
9	2020)	15.15	GO										
10	747	7	21.12	MA										
					R	esults per p	page:	50 ▼	1 – 27 o	f 27	K	<	>	>
PERSONAL HISTORY PROJECT HISTORY											C	REFRE	SH	^

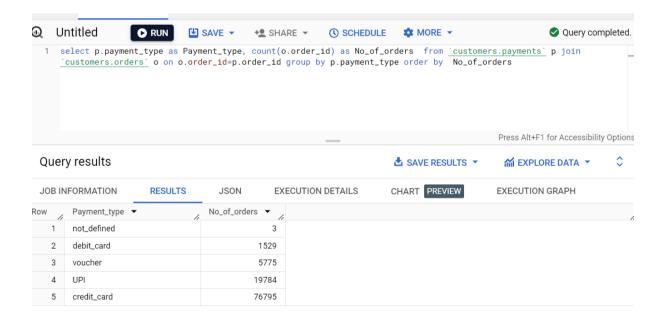
4:3

select c.customer_state, count(o.order_id)as
No_of_orders,round(sum(freight_value),2) as
Total_freight_value,
round(sum(freight_value)/count(o.order_id),2) as
Average_freight_value from `customers.order_items` as i join
`customers.orders` as o on i.order_id =o.order_id join
`customers.customers` as c on c.customer_id=o.customer_id
group by c.customer_state order by c.customer_state



6:1

select p.payment_type as Payment_type, count(o.order_id) as No_of_orders from
`customers.payments` p join `customers.orders` o on o.order_id=p.order_id group by
p.payment_type order by No_of_orders



6:2

select p.payment_installments as No_of_Installments, count(o.order_id) as
No_of_orders from `customers.payments` p join `customers.orders` o on
o.order_id=p.order_id group by p.payment_installments order by No_of_Installments

