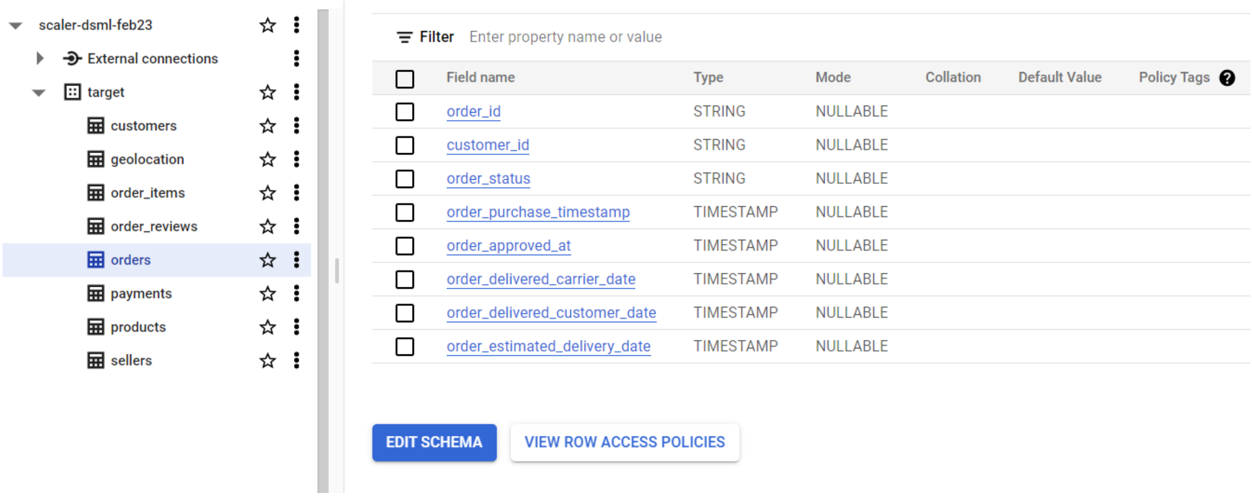
1. Import the dataset and do usual exploratory analysis steps like checking the structure & characteristics of the dataset

   1. Data type of columns in a table

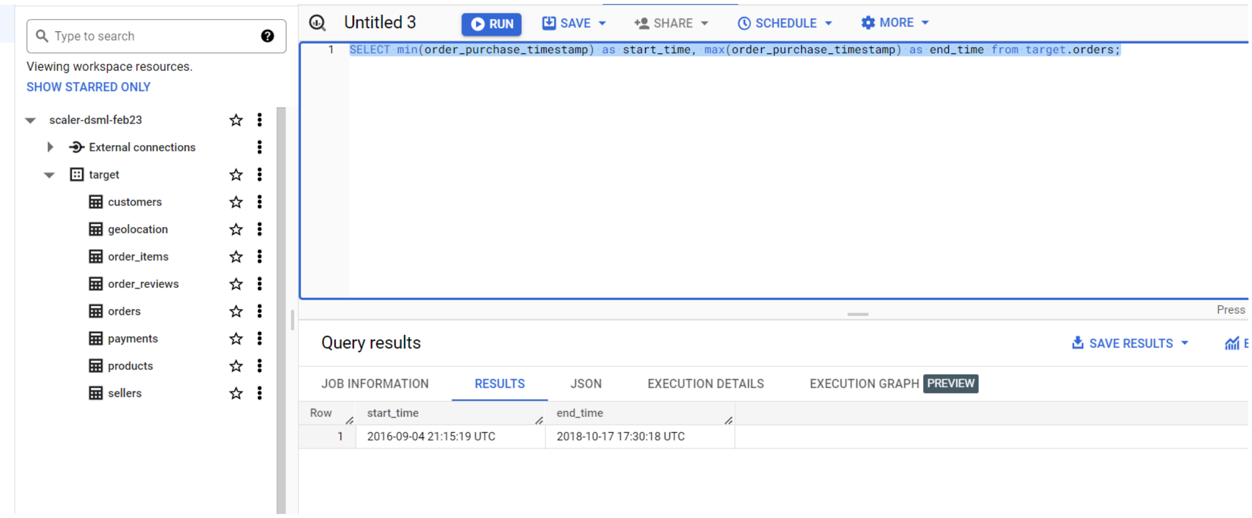


□	Field name	Type	Mode	Collation	Default Value	Policy Tags
□	order_id	STRING	NULLABLE			
□	customer_id	STRING	NULLABLE			
□	order_status	STRING	NULLABLE			
□	order_purchase_timestamp	TIMESTAMP	NULLABLE			
□	order_approved_at	TIMESTAMP	NULLABLE			
□	order_delivered_carrier_date	TIMESTAMP	NULLABLE			
□	order_delivered_customer_date	TIMESTAMP	NULLABLE			
□	order_estimated_delivery_date	TIMESTAMP	NULLABLE			

In orders table datatype are String and Timestamp. In this table only String and Timestamp data are present. Other type of data is not in this table.

   2. Time period for which the data is given

```
SELECT
  MIN(order_purchase_timestamp) AS start_time,
  MAX(order_purchase_timestamp) AS end_time
FROM
  target.orders;
```



```
SELECT min(order_purchase_timestamp) as start_time, max(order_purchase_timestamp) as end_time from target.orders;
```

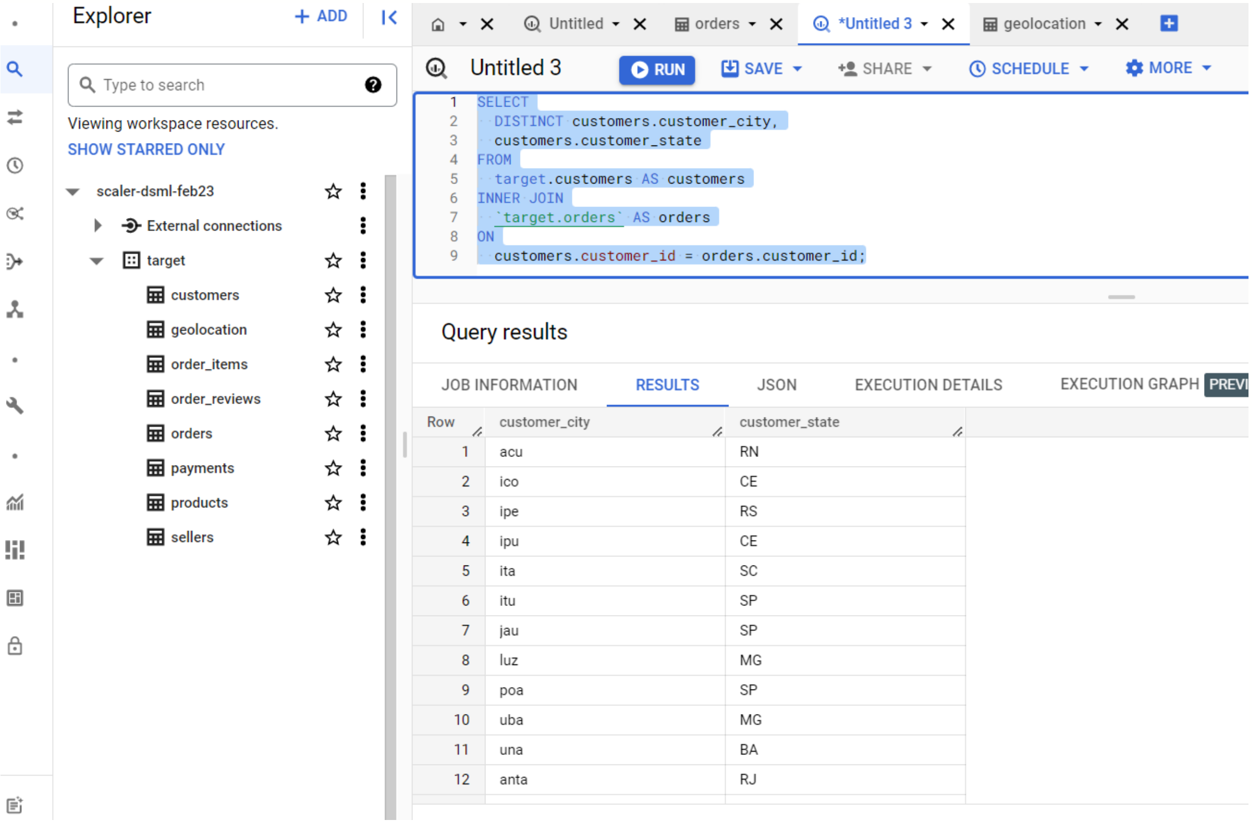
Row	start_time	end_time
1	2016-09-04 21:15:19 UTC	2018-10-17 17:30:18 UTC

Time period for which the data is given is 2016-09-04 21:15:19 UTC to 2018-10-17 17:30:18 UTC

3. Cities and States of customers ordered during the given period

```
  SELECT

   DISTINCT customers.customer_city,
   customers.customer_state
FROM
   target.customers AS customers
INNER JOIN
  `target.orders` AS orders
ON
  customers.customer_id = orders.customer_id;
```



```
SELECT
  DISTINCT customers.customer_city,
  customers.customer_state
FROM
  target.customers AS customers
INNER JOIN
  `target.orders` AS orders
ON
  customers.customer_id = orders.customer_id;
```

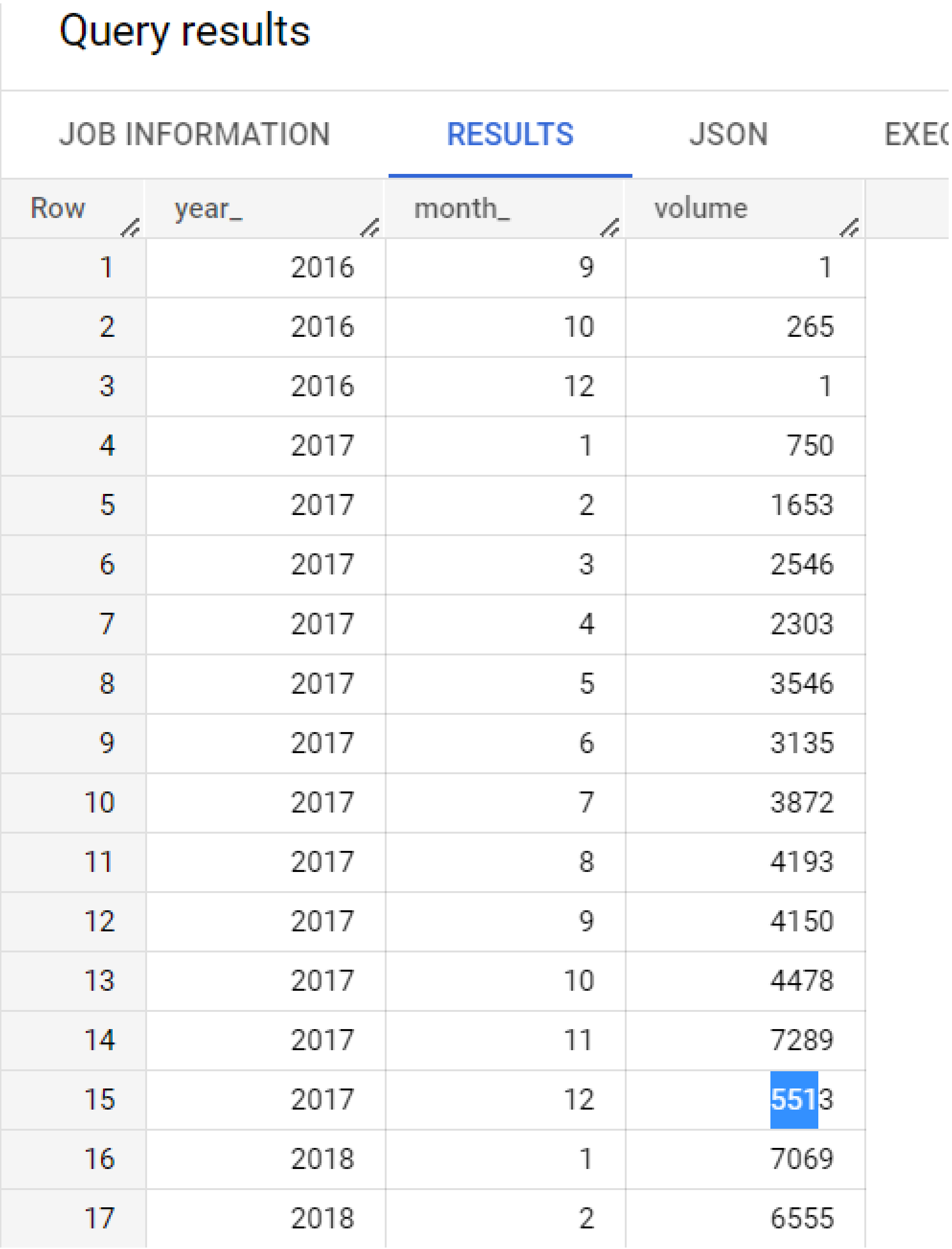
Row	customer_city	customer_state
1	acu	RN
2	ico	CE
3	ipe	RS
4	ipu	CE
5	ita	SC
6	itu	SP
7	jau	SP
8	luz	MG
9	poa	SP
10	uba	MG
11	una	BA
12	anta	RJ

Orders are from multiple city and state. In this dataset customer base is huge and it is spread over multiple city and state.

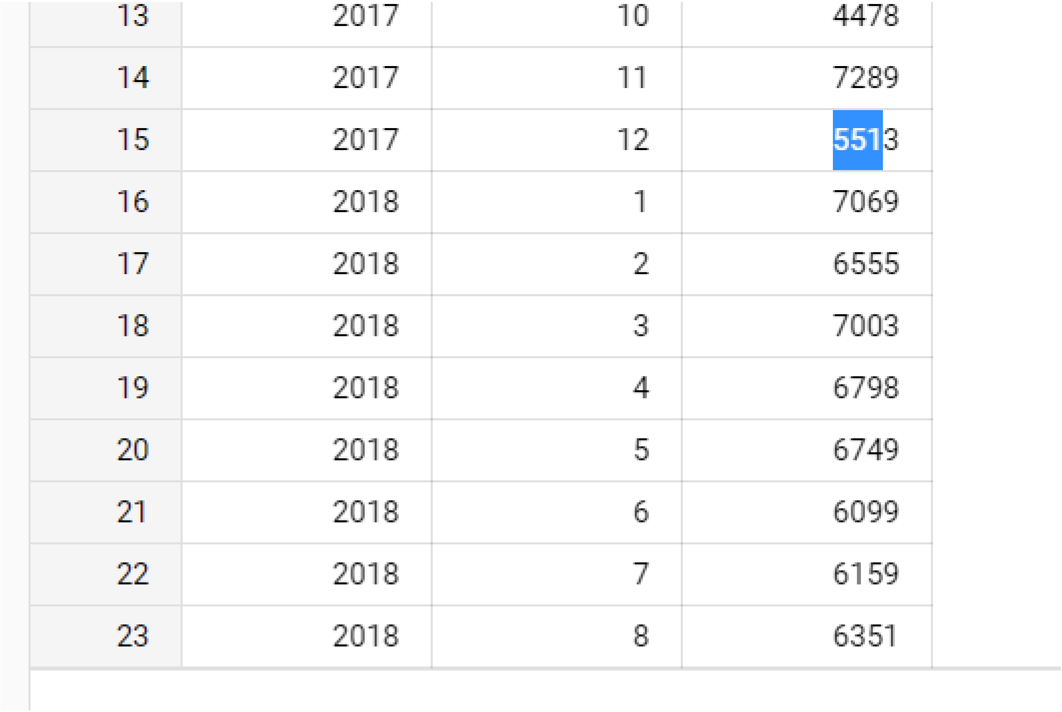
2. In-depth Exploration:

    1. Is there a growing trend on e-commerce in Brazil? How can we describe a complete scenario? Can we see some seasonality with peaks at specific months?

```
SELECT
EXTRACT(year
FROM
order_purchase_timestamp) AS year_,
EXTRACT(month
FROM
order_purchase_timestamp) AS month_,
COUNT(DISTINCT order_id) AS volume
FROM
target.orders
WHERE
order_status = 'delivered'
GROUP BY
year_,
month_
ORDER BY
year_,
month_;
```



Row	year_	month_	volume
1	2016	9	1
2	2016	10	265
3	2016	12	1
4	2017	1	750
5	2017	2	1653
6	2017	3	2546
7	2017	4	2303
8	2017	5	3546
9	2017	6	3135
10	2017	7	3872
11	2017	8	4193
12	2017	9	4150
13	2017	10	4478
14	2017	11	7289
15	2017	12	5513
16	2018	1	7069
17	2018	2	6555



13	2017	10	4478
14	2017	11	7289
15	2017	12	5513
16	2018	1	7069
17	2018	2	6555
18	2018	3	7003
19	2018	4	6798
20	2018	5	6749
21	2018	6	6099
22	2018	7	6159
23	2018	8	6351

From 9/2016 to 11/2017 – There are up and down in business in month-to-month basis. But over all business are up trending.

From 11/2017 to 8/2018 – There are downward trends in month-to-month basis. Some months are in up trends, but overall result are down trends.

In Brazil trend on e-commerce is not Growing. It is slightly downtrends.

Till 11/2017 market is in uptrends but after that it is downtrends.

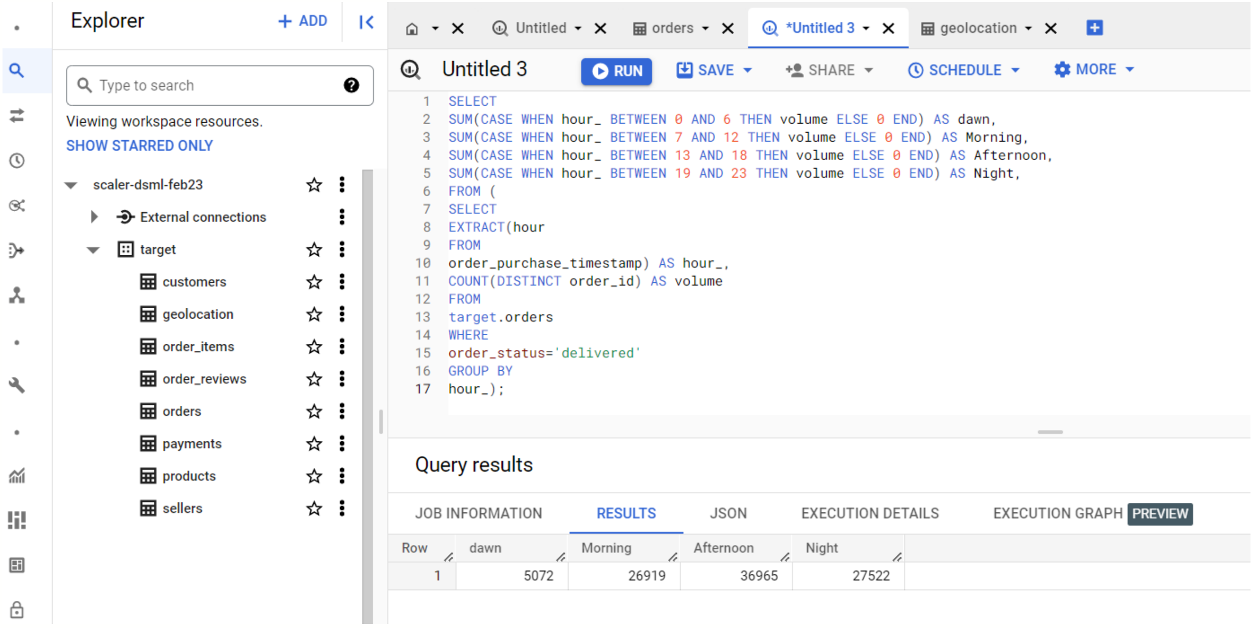
In 11/2017 there is a pick but we can not come to a conclusion that it is a seasonal pick but it is a monthly pick for 2017.

But if we use payment table then result is different. Please refer Question 4.1

2. What time do Brazilian customers tend to buy (Dawn, Morning, Afternoon or Night)?

   0-6 - Dawn
   7-12 - Morning
   13-18- Afternoon
   19-23- Night

```
SELECT
SUM(CASE WHEN hour_ BETWEEN 0 AND 6 THEN volume ELSE 0 END) AS dawn,
SUM(CASE WHEN hour_ BETWEEN 7 AND 12 THEN volume ELSE 0 END) AS Morning,
SUM(CASE WHEN hour_ BETWEEN 13 AND 18 THEN volume ELSE 0 END) AS Afternoon,
SUM(CASE WHEN hour_ BETWEEN 19 AND 23 THEN volume ELSE 0 END) AS Night,
FROM (
SELECT
EXTRACT(hour
FROM
order_purchase_timestamp) AS hour_,
COUNT(DISTINCT order_id) AS volume
FROM
target.orders
WHERE
order_status='delivered'
GROUP BY
hour_);
```



```
SELECT
SUM(CASE WHEN hour_ BETWEEN 0 AND 6 THEN volume ELSE 0 END) AS dawn,
SUM(CASE WHEN hour_ BETWEEN 7 AND 12 THEN volume ELSE 0 END) AS Morning,
SUM(CASE WHEN hour_ BETWEEN 13 AND 18 THEN volume ELSE 0 END) AS Afternoon,
SUM(CASE WHEN hour_ BETWEEN 19 AND 23 THEN volume ELSE 0 END) AS Night,
FROM (
SELECT
EXTRACT(hour
FROM
order_purchase_timestamp) AS hour_,
COUNT(DISTINCT order_id) AS volume
FROM
target.orders
WHERE
order_status='delivered'
GROUP BY
hour_);
```

Row	dawn	Morning	Afternoon	Night
1	5072	26919	36965	27522

Brazilian customers tend to buy in Afternoon. Second slot is Night, but Morning slot is also very close to night slot. But time zone is UTC. I am assuming here UTC = Brazilian time zone. Otherwise we need to calculate UTC – Brazilian time difference.

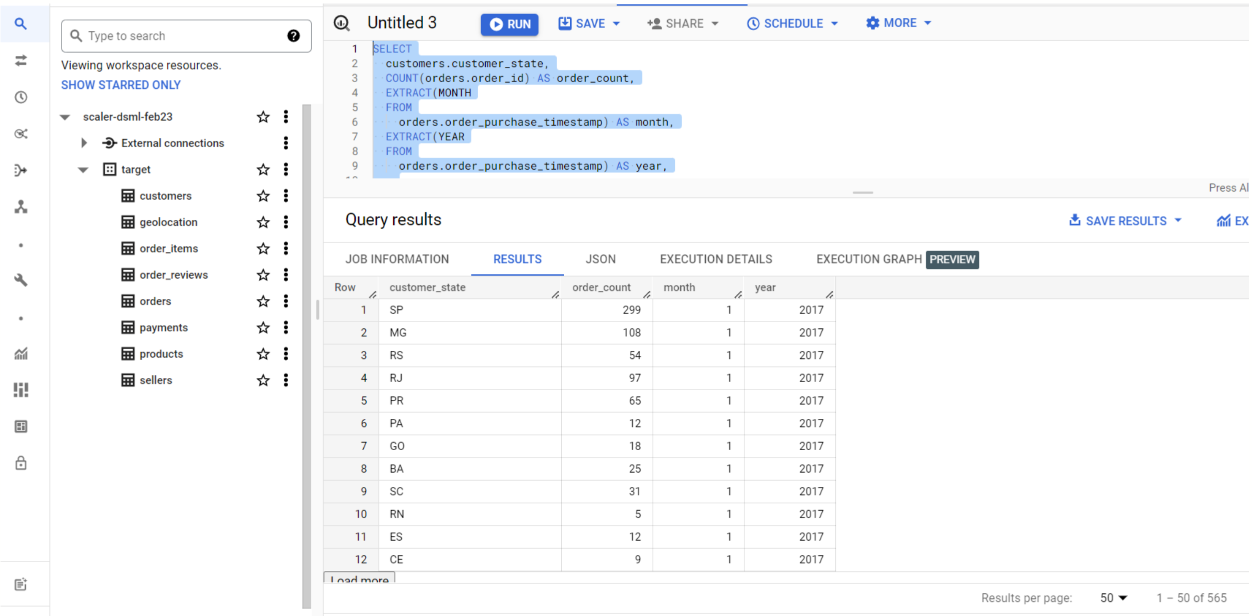
3. Evolution of E-commerce orders in the Brazil region:

   1. Get month on month orders by states

```
SELECT
  customers.customer_state,
  COUNT(orders.order_id) AS order_count,
  EXTRACT(MONTH
  FROM
    orders.order_purchase_timestamp) AS month,
  EXTRACT(YEAR
  FROM
    orders.order_purchase_timestamp) AS year,

FROM
            `target.customers` AS customers
       INNER JOIN
         `target.orders` AS orders
       ON
         customers.customer_id = orders.customer_id

GROUP BY
  customer_state,
  month,
  year
ORDER BY
  month,
  year;
```



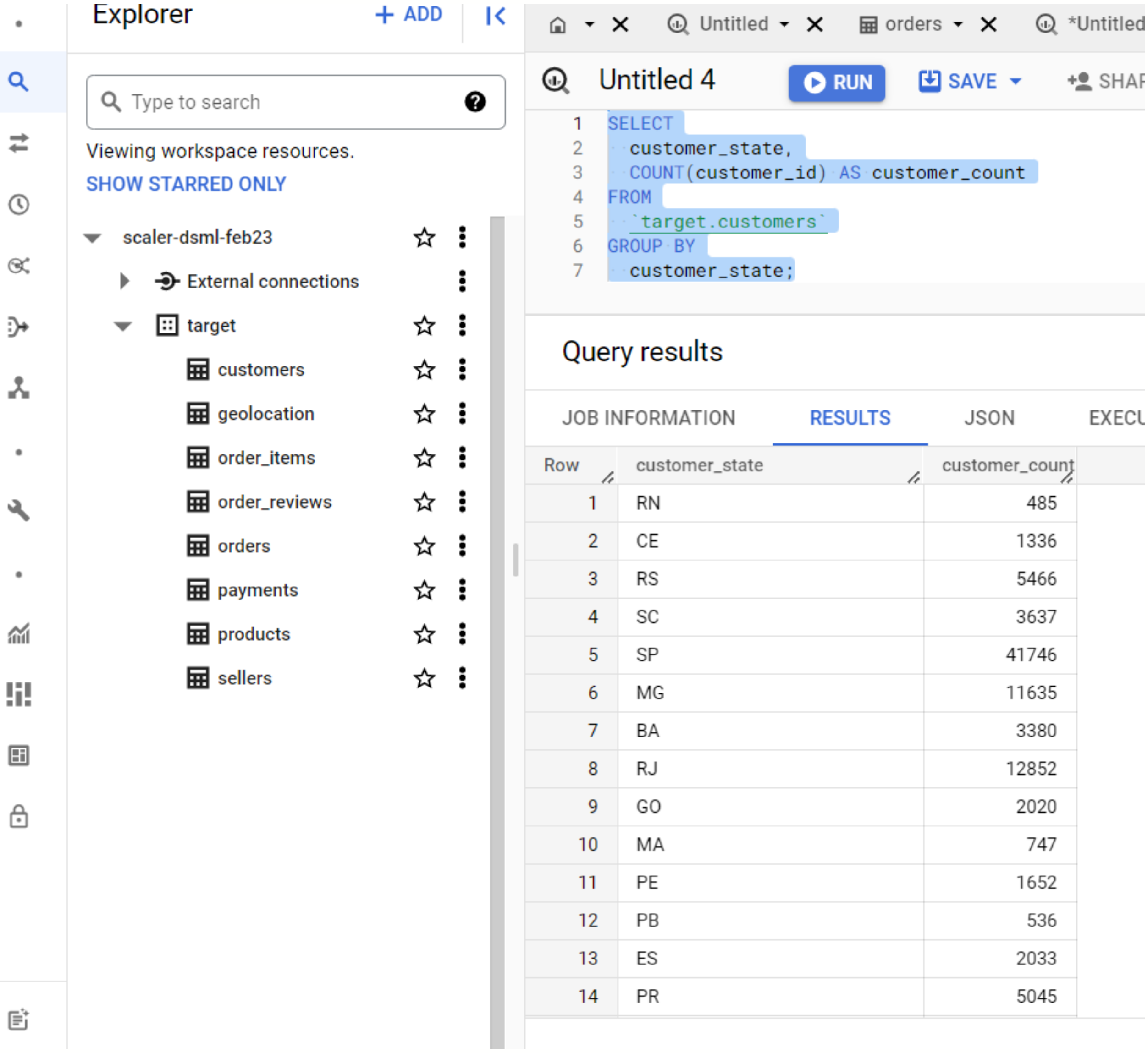
```
SELECT
  customers.customer_state,
  COUNT(orders.order_id) AS order_count,
  EXTRACT(MONTH
  FROM
    orders.order_purchase_timestamp) AS month,
  EXTRACT(YEAR
  FROM
    orders.order_purchase_timestamp) AS year,
```

Query results

Row	customer_state	order_count	month	year
1	SP	299	1	2017
2	MG	108	1	2017
3	RS	54	1	2017
4	RJ	97	1	2017
5	PR	65	1	2017
6	PA	12	1	2017
7	GO	18	1	2017
8	BA	25	1	2017
9	SC	31	1	2017
10	RN	5	1	2017
11	ES	12	1	2017
12	CE	9	1	2017

2. Distribution of customers across the states in Brazil

```sql
SELECT
  customer_state,
  COUNT(customer_id) AS customer_count
FROM
  `target.customers`
GROUP BY
  customer_state;
```



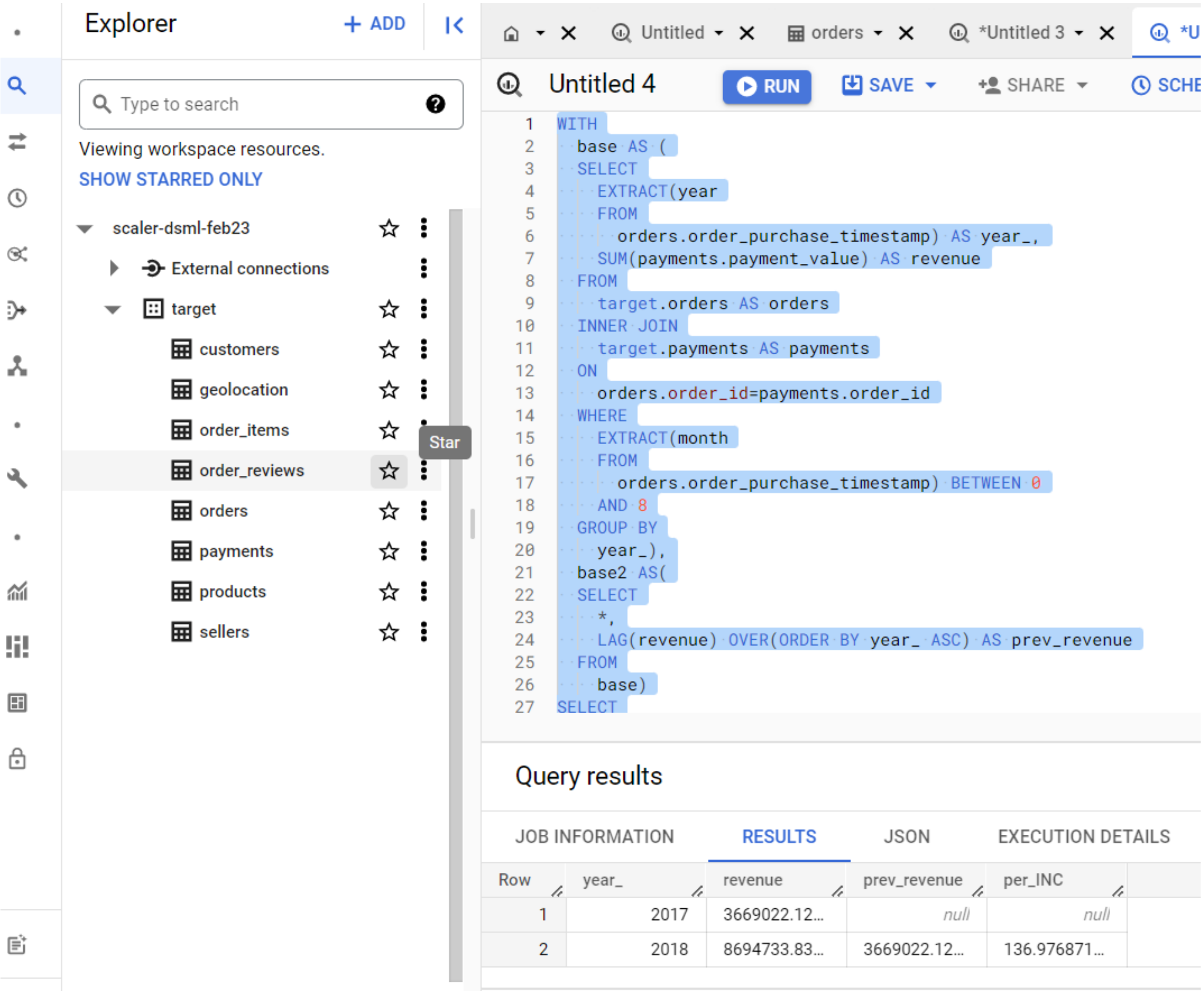
```sql
SELECT
  customer_state,
  COUNT(customer_id) AS customer_count
FROM
  `target.customers`
GROUP BY
  customer_state;
```

Row	customer_state	customer_count
1	RN	485
2	CE	1336
3	RS	5466
4	SC	3637
5	SP	41746
6	MG	11635
7	BA	3380
8	RJ	12852
9	GO	2020
10	MA	747
11	PE	1652
12	PB	536
13	ES	2033
14	PR	5045

4. Impact on Economy: Analyze the money movement by e-commerce by looking at order prices, freight and others.

1. Get % increase in cost of orders from 2017 to 2018 (include months between Jan to Aug only) - You can use “payment_value” column in payments table

```
WITH
  base AS (
  SELECT
    EXTRACT(year
    FROM
      orders.order_purchase_timestamp) AS year_,
    SUM(payments.payment_value) AS revenue
  FROM
    target.orders AS orders
  INNER JOIN
    target.payments AS payments
  ON
    orders.order_id=payments.order_id
  WHERE
    EXTRACT(month
    FROM
      orders.order_purchase_timestamp) BETWEEN 0
    AND 8
  GROUP BY
    year_),
  base2 AS(
  SELECT
    *,
    LAG(revenue) OVER(ORDER BY year_ ASC) AS prev_revenue
  FROM
    base)
SELECT
  *,
  (revenue-prev_revenue)/prev_revenue*100 AS per_INC
FROM
  base2;
```



```
WITH
  base AS (
  SELECT
    EXTRACT(year
    FROM
      orders.order_purchase_timestamp) AS year_,
    SUM(payments.payment_value) AS revenue
  FROM
    target.orders AS orders
  INNER JOIN
    target.payments AS payments
  ON
    orders.order_id=payments.order_id
  WHERE
    EXTRACT(month
    FROM
      orders.order_purchase_timestamp) BETWEEN 0
    AND 8
  GROUP BY
    year_),
  base2 AS(
  SELECT
    *,
    LAG(revenue) OVER(ORDER BY year_ ASC) AS prev_revenue
  FROM
    base)
SELECT
```

Query results

JOB INFORMATION | RESULTS | JSON | EXECUTION DETAILS

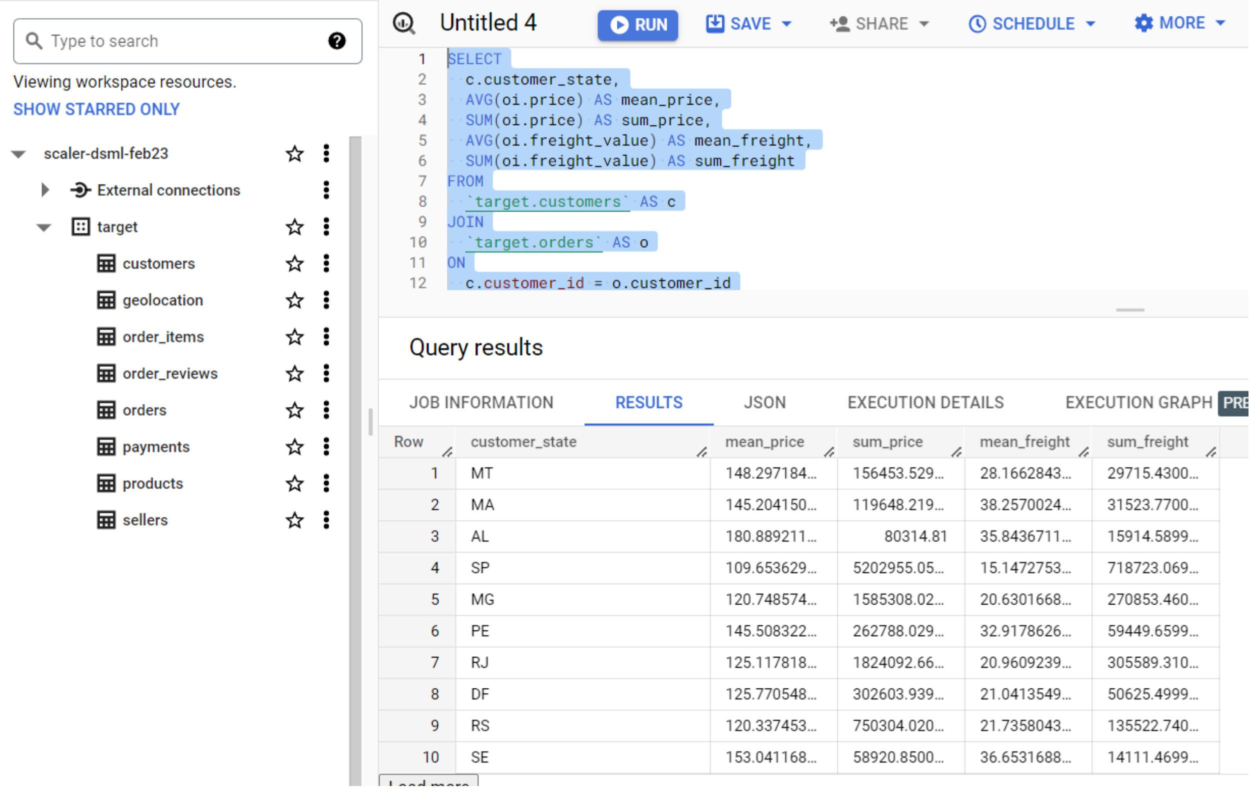
Row	year_	revenue	prev_revenue	per_INC
1	2017	3669022.12...	null	null
2	2018	8694733.83...	3669022.12...	136.976871...

136.976871% increase in cost of orders from 2017 to 2018(include months between Jan to Aug only).

2. Mean & Sum of price and freight value by customer state

```
 SELECT
  c.customer_state,
  AVG(oi.price) AS mean_price,
  SUM(oi.price) AS sum_price,
  AVG(oi.freight_value) AS mean_freight,
  SUM(oi.freight_value) AS sum_freight
FROM
  `target.customers` AS c
JOIN
```

```
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  c.customer_state;
```



```
SELECT
  c.customer_state,
  AVG(oi.price) AS mean_price,
  SUM(oi.price) AS sum_price,
  AVG(oi.freight_value) AS mean_freight,
  SUM(oi.freight_value) AS sum_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
```

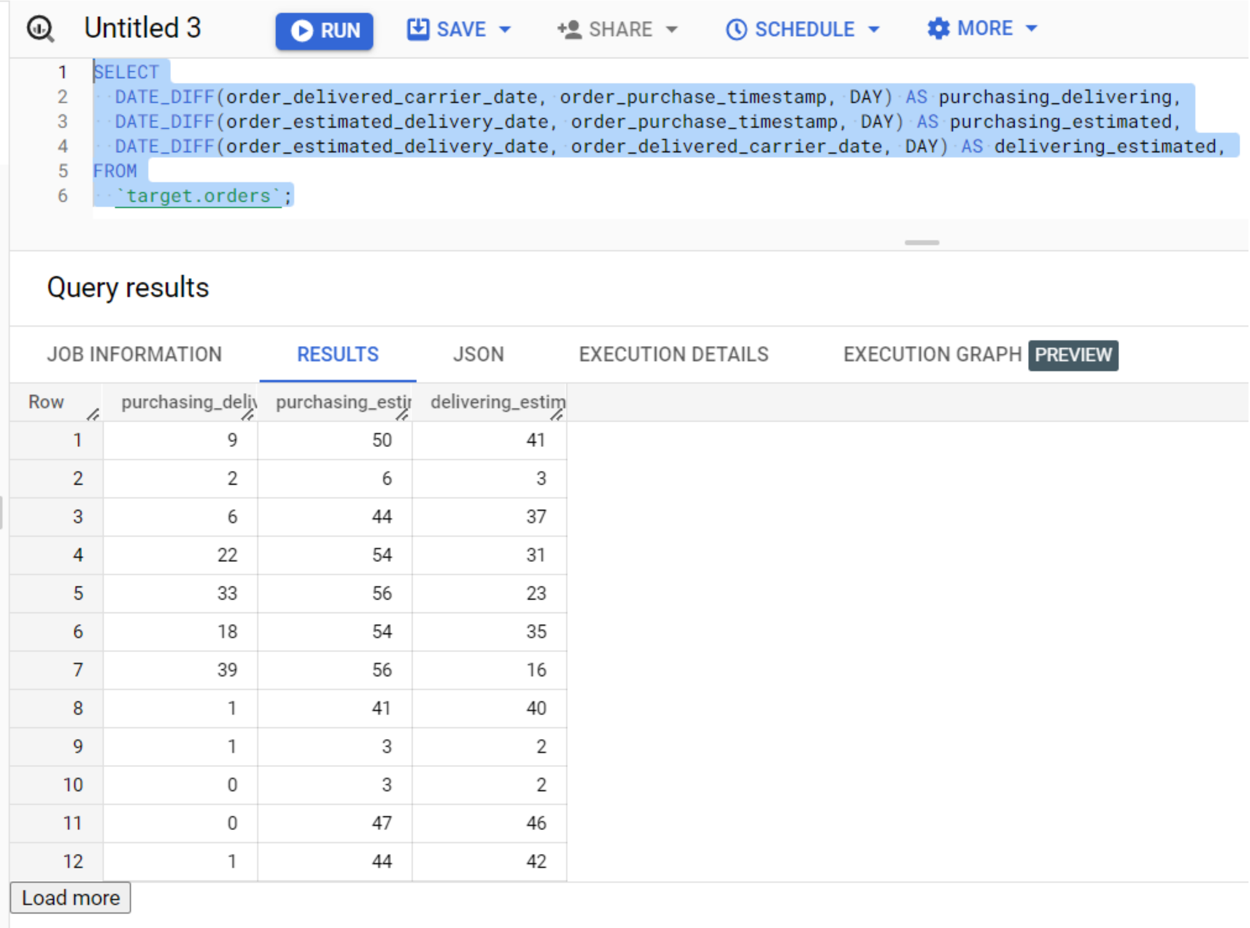
Query results

Row	customer_state	mean_price	sum_price	mean_freight	sum_freight
1	MT	148.297184...	156453.529...	28.1662843...	29715.4300...
2	MA	145.204150...	119648.219...	38.2570024...	31523.7700...
3	AL	180.889211...	80314.81	35.8436711...	15914.5899...
4	SP	109.653629...	5202955.05...	15.1472753...	718723.069...
5	MG	120.748574...	1585308.02...	20.6301668...	270853.460...
6	PE	145.508322...	262788.029...	32.9178626...	59449.6599...
7	RJ	125.117818...	1824092.66...	20.9609239...	305589.310...
8	DF	125.770548...	302603.939...	21.0413549...	50625.4999...
9	RS	120.337453...	750304.020...	21.7358043...	135522.740...
10	SE	153.041168...	58920.8500...	36.6531688...	14111.4699...

5. Analysis on sales, freight and delivery time

1. Calculate days between purchasing, delivering and estimated delivery

```
SELECT
  DATE_DIFF(order_delivered_carrier_date, order_purchase_timestamp, DAY) AS purchasing_delivering,
  DATE_DIFF(order_estimated_delivery_date, order_purchase_timestamp, DAY) AS purchasing_estimated,
  DATE_DIFF(order_estimated_delivery_date, order_delivered_carrier_date, DAY) AS delivering_estimated,
FROM
  `target.orders`;
```



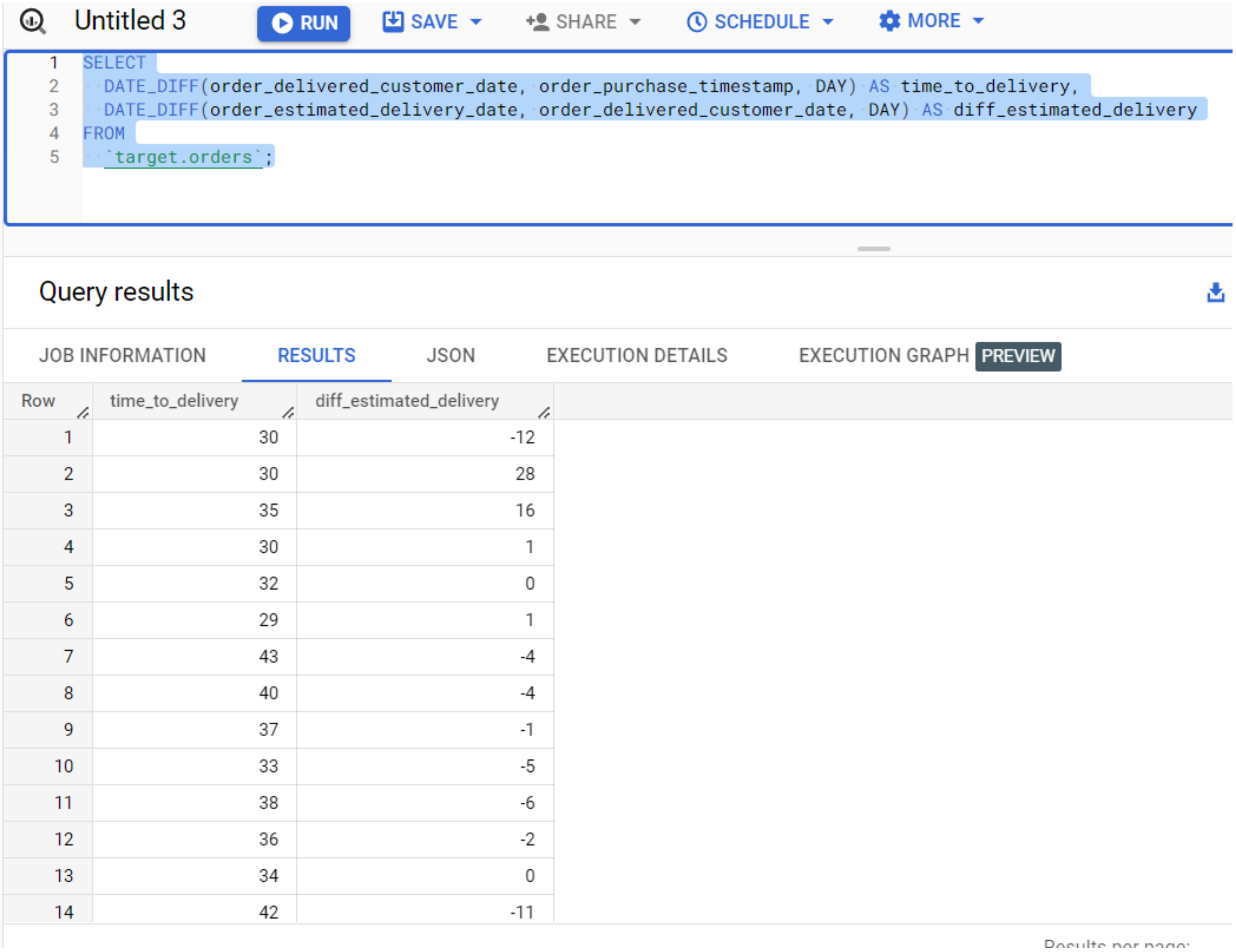
```
SELECT
  DATE_DIFF(order_delivered_carrier_date, order_purchase_timestamp, DAY) AS purchasing_delivering,
  DATE_DIFF(order_estimated_delivery_date, order_purchase_timestamp, DAY) AS purchasing_estimated,
  DATE_DIFF(order_estimated_delivery_date, order_delivered_carrier_date, DAY) AS delivering_estimated,
FROM
  `target.orders`;
```

Query results

Row	purchasing_deli	purchasing_esti	delivering_estim
1	9	50	41
2	2	6	3
3	6	44	37
4	22	54	31
5	33	56	23
6	18	54	35
7	39	56	16
8	1	41	40
9	1	3	2
10	0	3	2
11	0	47	46
12	1	44	42

2. Find time_to_delivery & diff_estimated_delivery. Formula for the same given below:
    a. time_to_delivery = order_purchase_timestamp-order_delivered_customer_date
    b. diff_estimated_delivery = order_estimated_delivery_date-order_delivered_customer_date

```
SELECT
  DATE_DIFF(order_delivered_customer_date, order_purchase_timestamp, DAY) AS time_
to_delivery,
  DATE_DIFF(order_estimated_delivery_date, order_delivered_customer_date, DAY) AS
diff_estimated_delivery
FROM
  `target.orders`;
```



```
SELECT
  DATE_DIFF(order_delivered_customer_date, order_purchase_timestamp, DAY) AS time_to_delivery,
  DATE_DIFF(order_estimated_delivery_date, order_delivered_customer_date, DAY) AS diff_estimated_delivery
FROM
  `target.orders`;
```

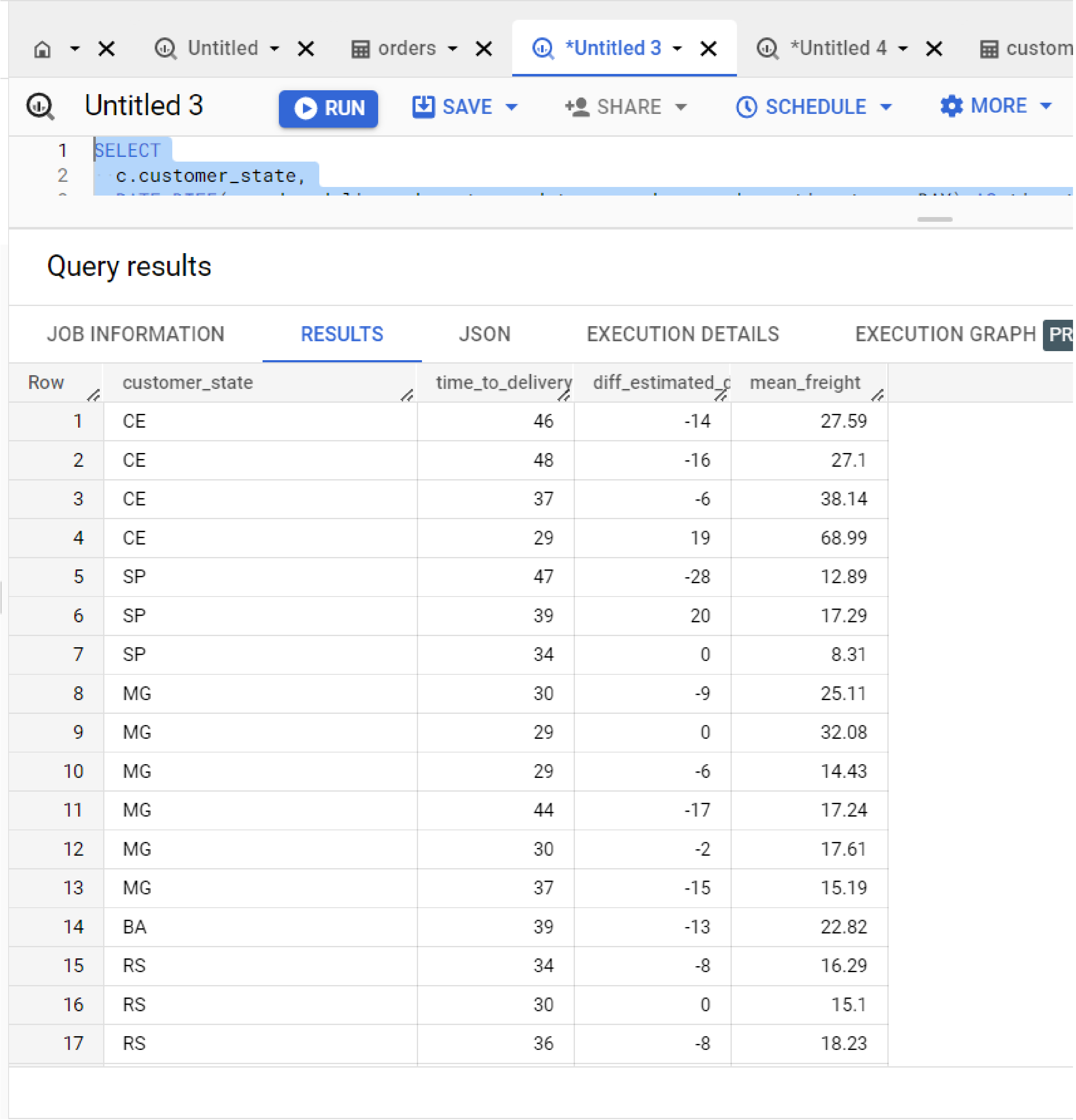
Query results

Row	time_to_delivery	diff_estimated_delivery
1	30	-12
2	30	28
3	35	16
4	30	1
5	32	0
6	29	1
7	43	-4
8	40	-4
9	37	-1
10	33	-5
11	38	-6
12	36	-2
13	34	0
14	42	-11

3. Group data by state, take mean of freight_value, time_to_delivery, diff_estimated_delivery

```
SELECT

 c.customer_state,
  DATE_DIFF(o.order_delivered_customer_date, o.order_purchase_timestamp, DAY) AS time_to_delivery,
  DATE_DIFF(o.order_estimated_delivery_date, o.order_delivered_customer_date, DAY) AS diff_estimated_delivery,
  AVG(oi.freight_value) AS mean_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state,
  order_delivered_customer_date,
  order_purchase_timestamp,
  order_estimated_delivery_date;
```



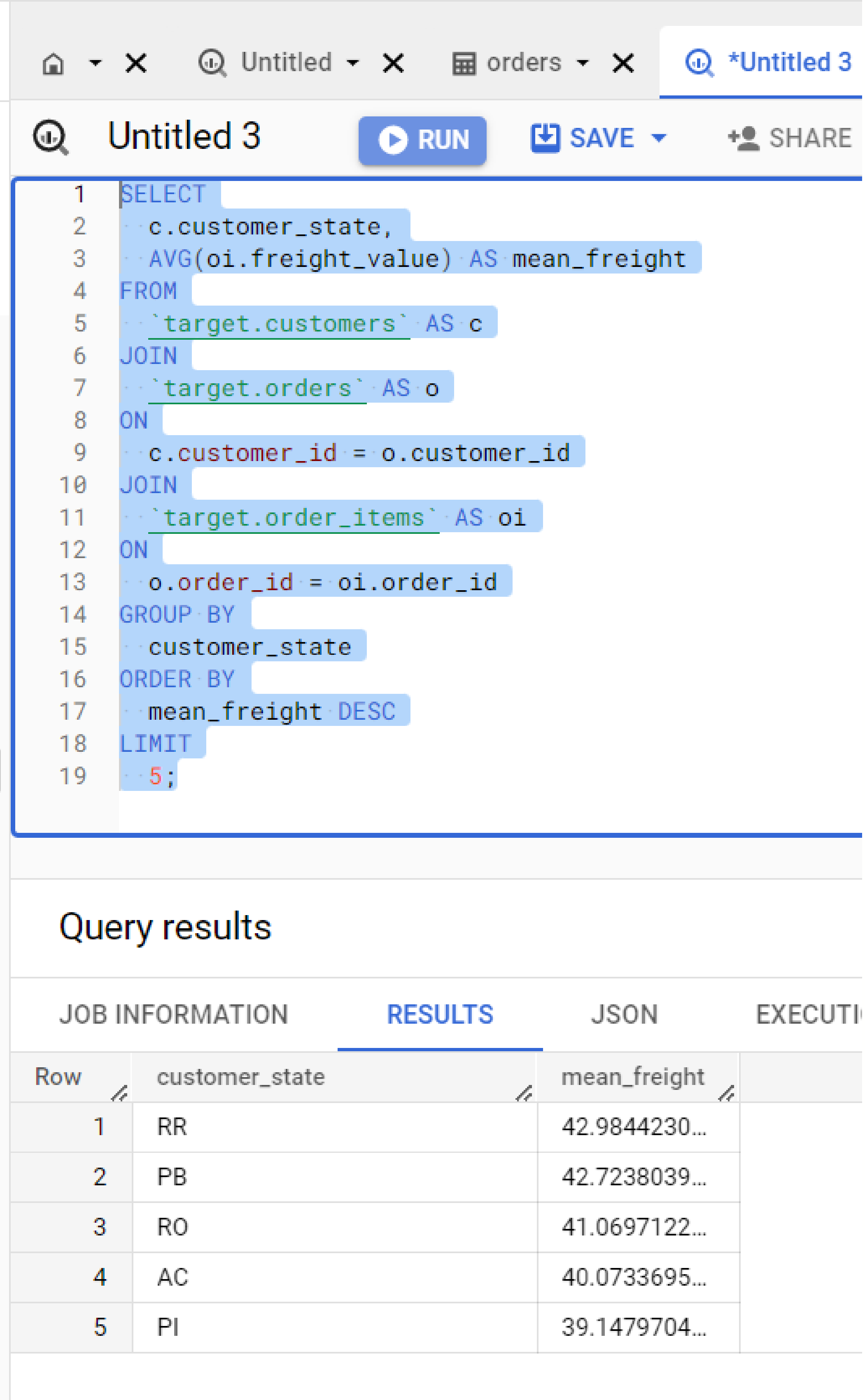
```
SELECT
  c.customer_state,
```

Row	customer_state	time_to_delivery	diff_estimated_c	mean_freight
1	CE	46	-14	27.59
2	CE	48	-16	27.1
3	CE	37	-6	38.14
4	CE	29	19	68.99
5	SP	47	-28	12.89
6	SP	39	20	17.29
7	SP	34	0	8.31
8	MG	30	-9	25.11
9	MG	29	0	32.08
10	MG	29	-6	14.43
11	MG	44	-17	17.24
12	MG	30	-2	17.61
13	MG	37	-15	15.19
14	BA	39	-13	22.82
15	RS	34	-8	16.29
16	RS	30	0	15.1
17	RS	36	-8	18.23

4. Sort the data to get the following:
5. Top 5 states with highest/lowest average freight value - sort in desc/asc limit 5

Highest –

```
SELECT
  c.customer_state,
  AVG(oi.freight_value) AS mean_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  mean_freight DESC
LIMIT
  5;
```



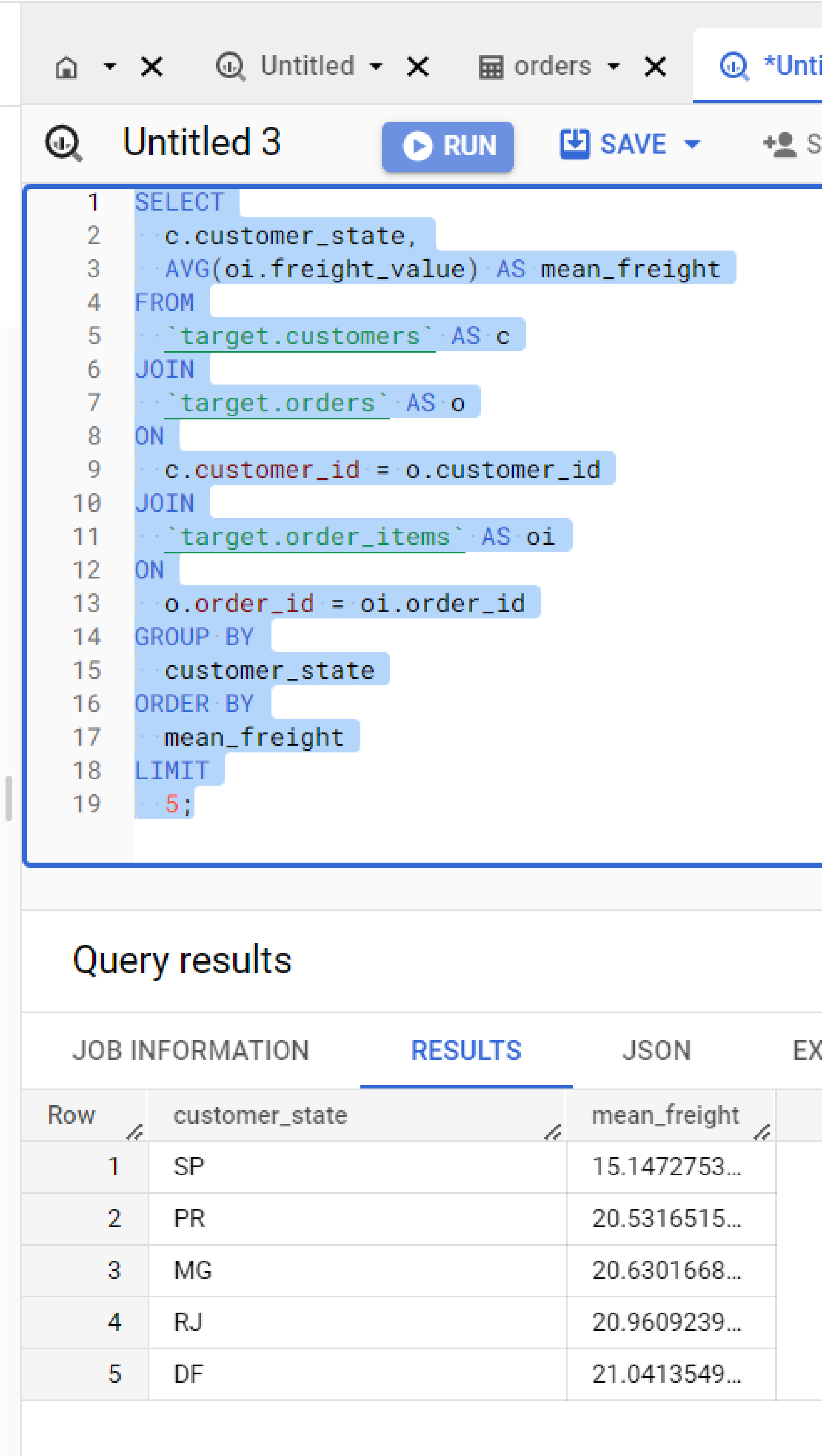
```
SELECT
  c.customer_state,
  AVG(oi.freight_value) AS mean_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  mean_freight DESC
LIMIT
  5;
```

Query results

Row	customer_state	mean_freight
1	RR	42.9844230...
2	PB	42.7238039...
3	RO	41.0697122...
4	AC	40.0733695...
5	PI	39.1479704...

Lowest-

```
SELECT
  c.customer_state,
  AVG(oi.freight_value) AS mean_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  mean_freight
LIMIT
  5;
```



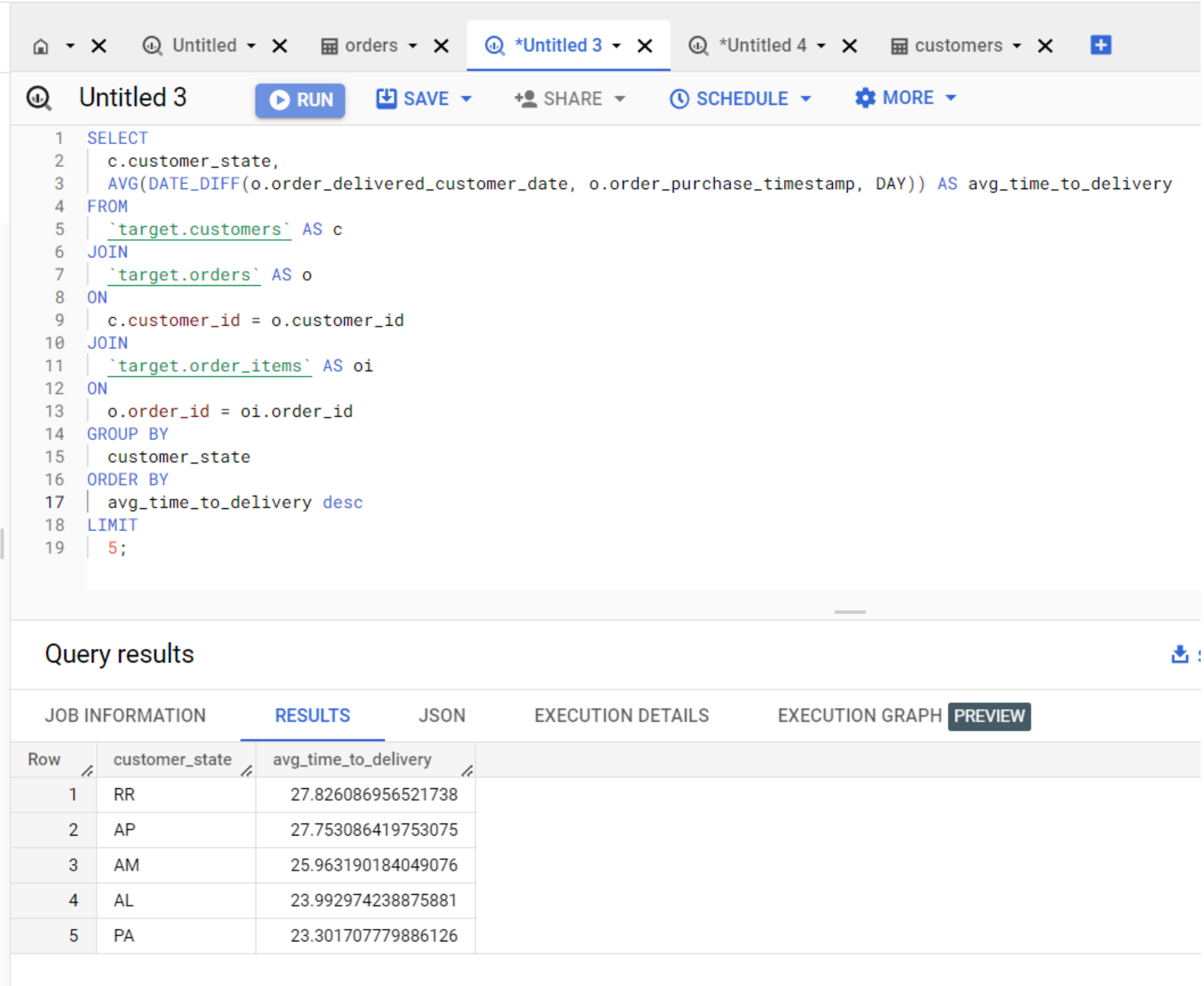
```
SELECT
  c.customer_state,
  AVG(oi.freight_value) AS mean_freight
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  mean_freight
LIMIT
  5;
```

Row	customer_state	mean_freight
1	SP	15.1472753...
2	PR	20.5316515...
3	MG	20.6301668...
4	RJ	20.9609239...
5	DF	21.0413549...

6. Top 5 states with highest/lowest average time to delivery

Highest –

```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_delivered_customer_date, o.order_purchase_timestamp, DAY
)) AS avg_time_to_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  avg_time_to_delivery desc
LIMIT
  5;
```



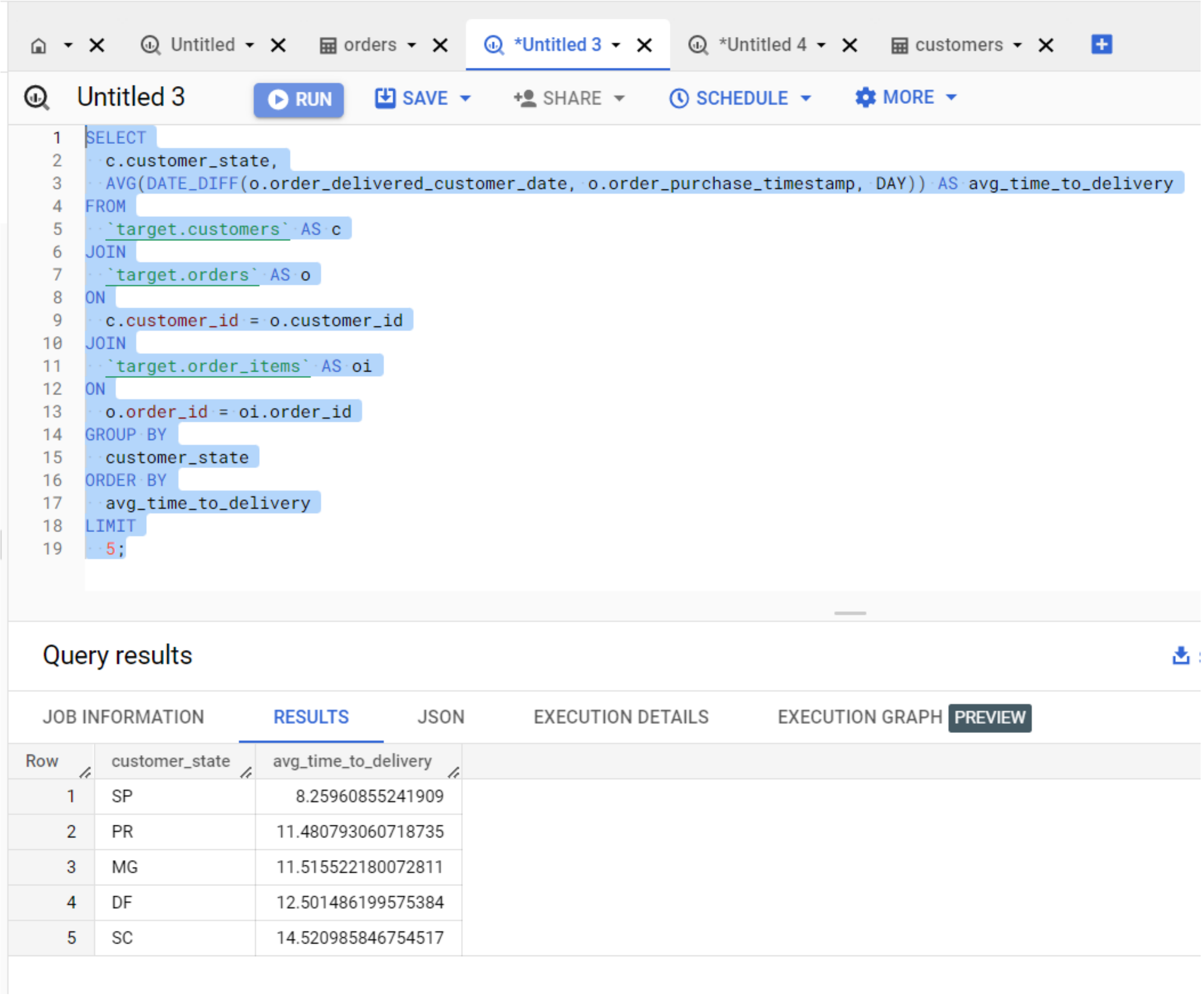
```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_delivered_customer_date, o.order_purchase_timestamp, DAY)) AS avg_time_to_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  avg_time_to_delivery desc
LIMIT
  5;
```

Row	customer_state	avg_time_to_delivery
1	RR	27.826086956521738
2	AP	27.753086419753075
3	AM	25.963190184049076
4	AL	23.992974238875881
5	PA	23.301707779886126

Lowest –

```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_delivered_customer_date, o.order_purchase_timestamp, DAY
)) AS avg_time_to_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
```

```
  customer_state
ORDER BY
  avg_time_to_delivery
LIMIT
  5;
```



```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_delivered_customer_date, o.order_purchase_timestamp, DAY)) AS avg_time_to_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  avg_time_to_delivery
LIMIT
  5;
```

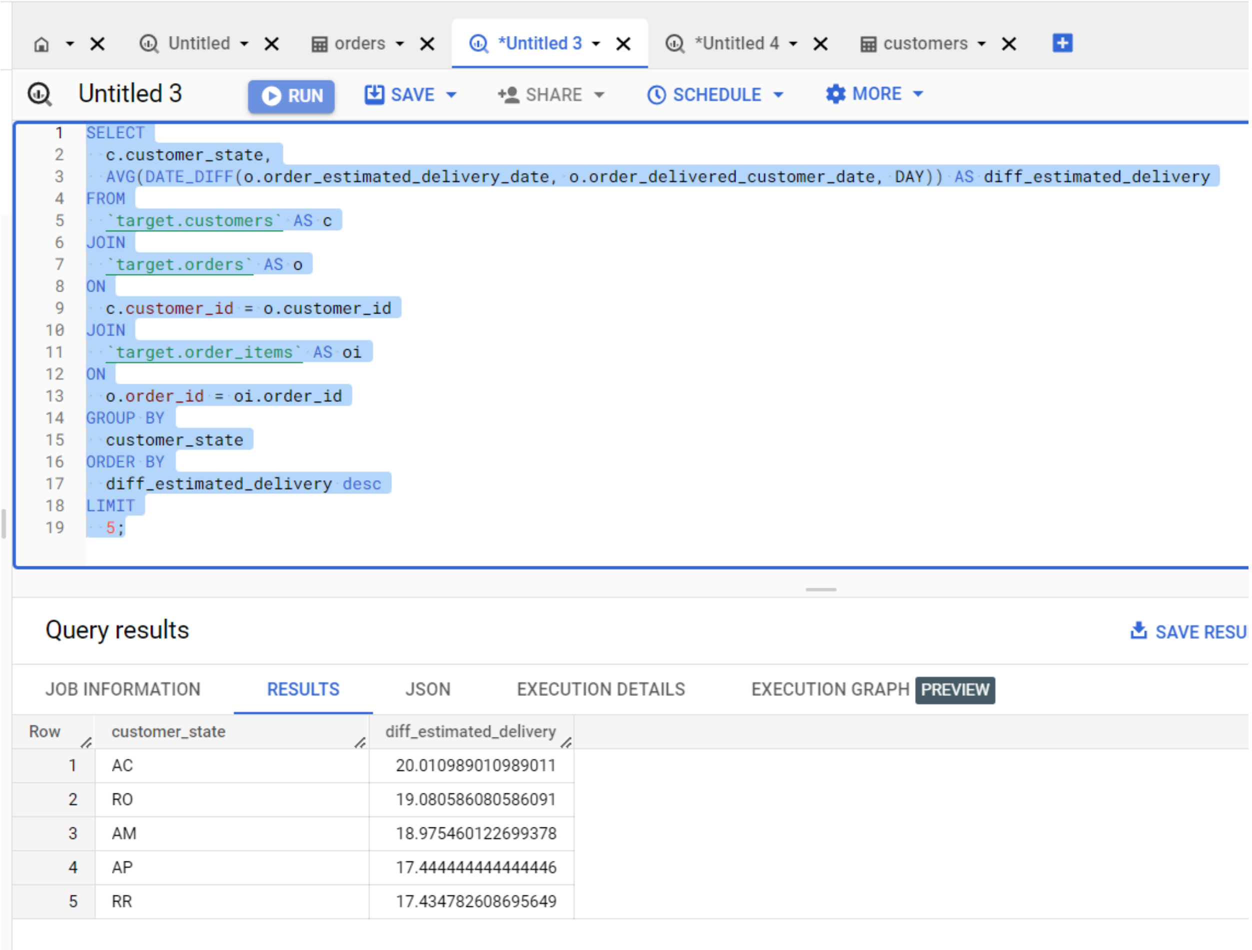
Row	customer_state	avg_time_to_delivery
1	SP	8.25960855241909
2	PR	11.480793060718735
3	MG	11.515522180072811
4	DF	12.501486199575384
5	SC	14.520985846754517

7. Top 5 states where delivery is really fast/ not so fast compared to estimated date

Really Fast compared to estimated date –

```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_estimated_delivery_date, o.order_delivered_customer_date,
DAY)) AS diff_estimated_delivery
FROM
```

```
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  diff_estimated_delivery desc
LIMIT
  5;
```

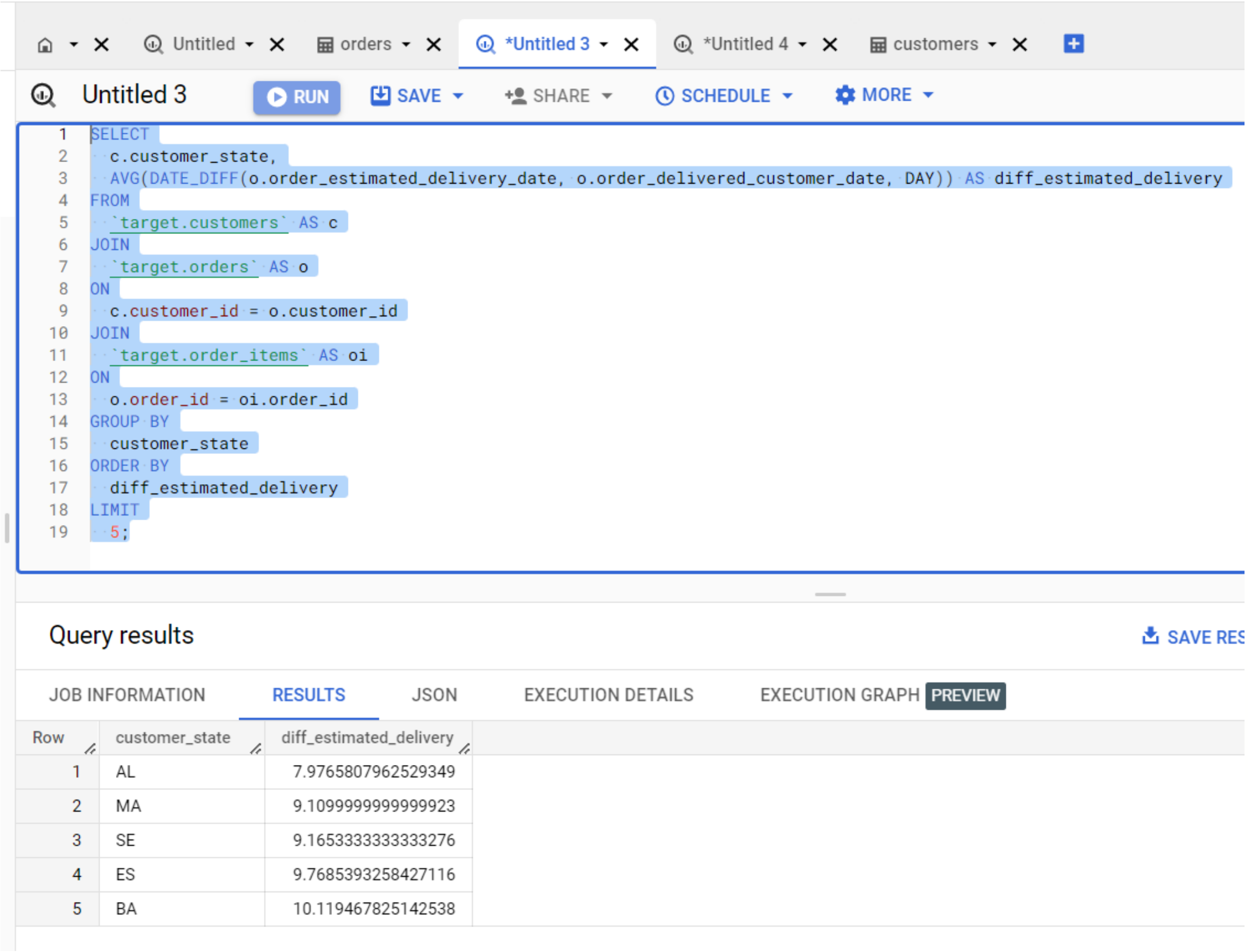


```
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_estimated_delivery_date, o.order_delivered_customer_date, DAY)) AS diff_estimated_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  diff_estimated_delivery desc
LIMIT
  5;
```

Row	customer_state	diff_estimated_delivery
1	AC	20.010989010989011
2	RO	19.080586080586091
3	AM	18.975460122699378
4	AP	17.444444444444446
5	RR	17.434782608695649

Not so fast compared to estimated date –

```sql
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_estimated_delivery_date, o.order_delivered_customer_date, DAY)) AS diff_estimated_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  diff_estimated_delivery
LIMIT
  5;
```



```sql
SELECT
  c.customer_state,
  AVG(DATE_DIFF(o.order_estimated_delivery_date, o.order_delivered_customer_date, DAY)) AS diff_estimated_delivery
FROM
  `target.customers` AS c
JOIN
  `target.orders` AS o
ON
  c.customer_id = o.customer_id
JOIN
  `target.order_items` AS oi
ON
  o.order_id = oi.order_id
GROUP BY
  customer_state
ORDER BY
  diff_estimated_delivery
LIMIT
  5;
```

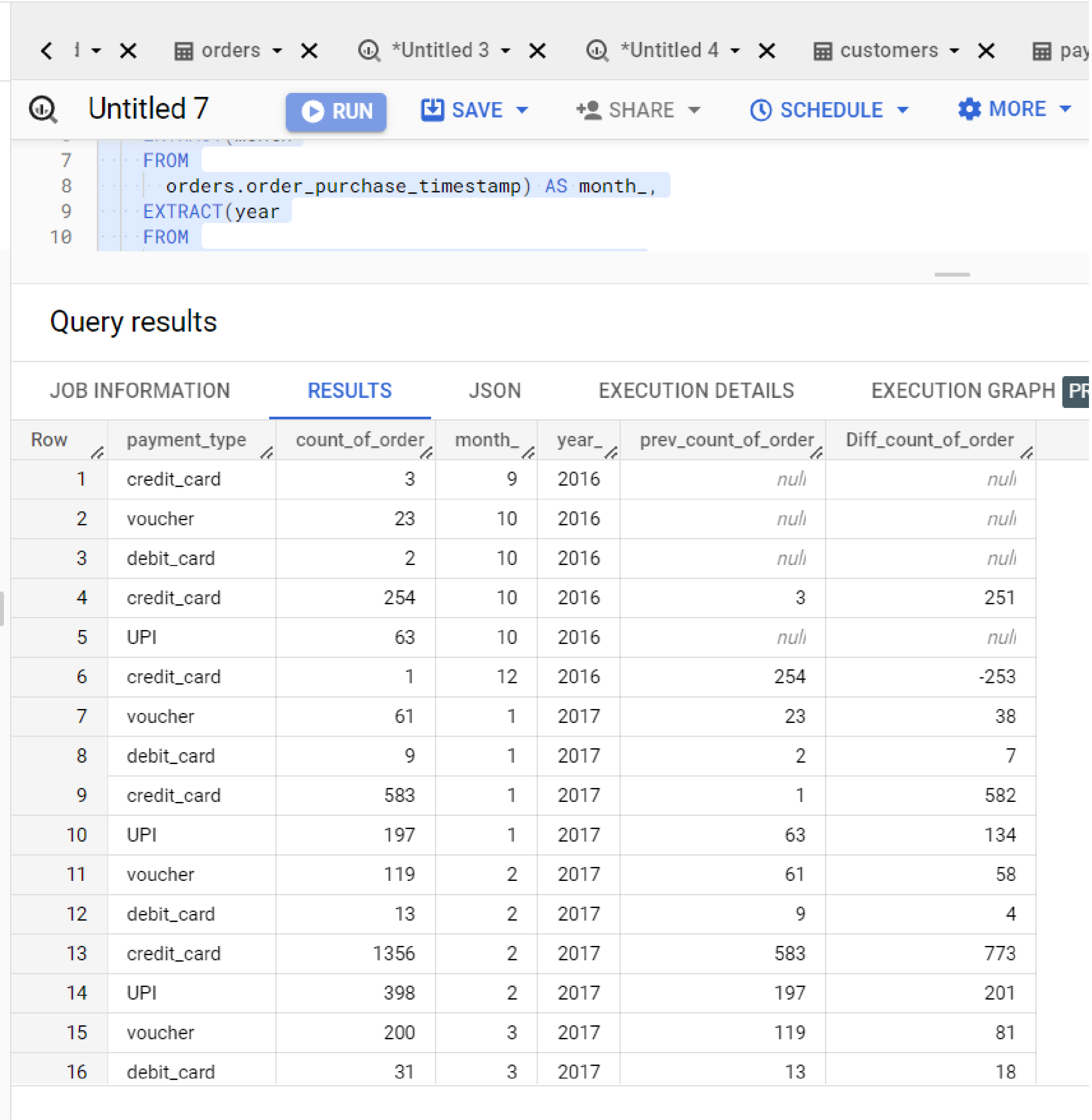
Query results

Row	customer_state	diff_estimated_delivery
1	AL	7.9765807962529349
2	MA	9.1099999999999923
3	SE	9.1653333333333276
4	ES	9.7685393258427116
5	BA	10.119467825142538

6. Payment type analysis:

1. Month over Month count of orders for different payment types

```
WITH
  base AS(
  SELECT
    payment_type,
    COUNT(payments.order_id) AS count_of_order,
    EXTRACT(month
    FROM
      orders.order_purchase_timestamp) AS month_,
    EXTRACT(year
    FROM
      orders.order_purchase_timestamp) AS year_
  FROM
    target.orders AS orders
  INNER JOIN
    target.payments AS payments
  ON
    orders.order_id=payments.order_id
  GROUP BY
    payment_type,
    month_,
    year_
  ORDER BY
    year_,
    month_),
  base2 AS(
  SELECT
    *,
    LAG(count_of_order) OVER(PARTITION BY payment_type ORDER BY year_, month_) AS prev_
count_of_order
  FROM
    base
  ORDER BY
    year_,
    month_)
SELECT
  *,
  (count_of_order-prev_count_of_order)AS Diff_count_of_order
FROM
  base2
ORDER BY
  year_,
  month_;
```

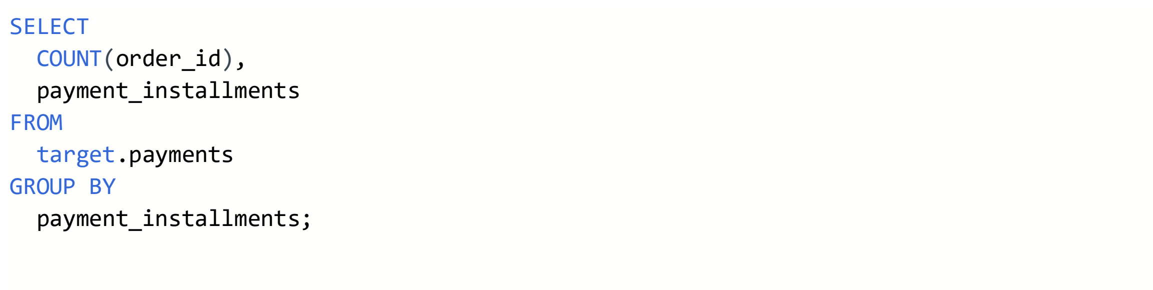


```
    FROM
      orders.order_purchase_timestamp) AS month_,
    EXTRACT(year
    FROM
```

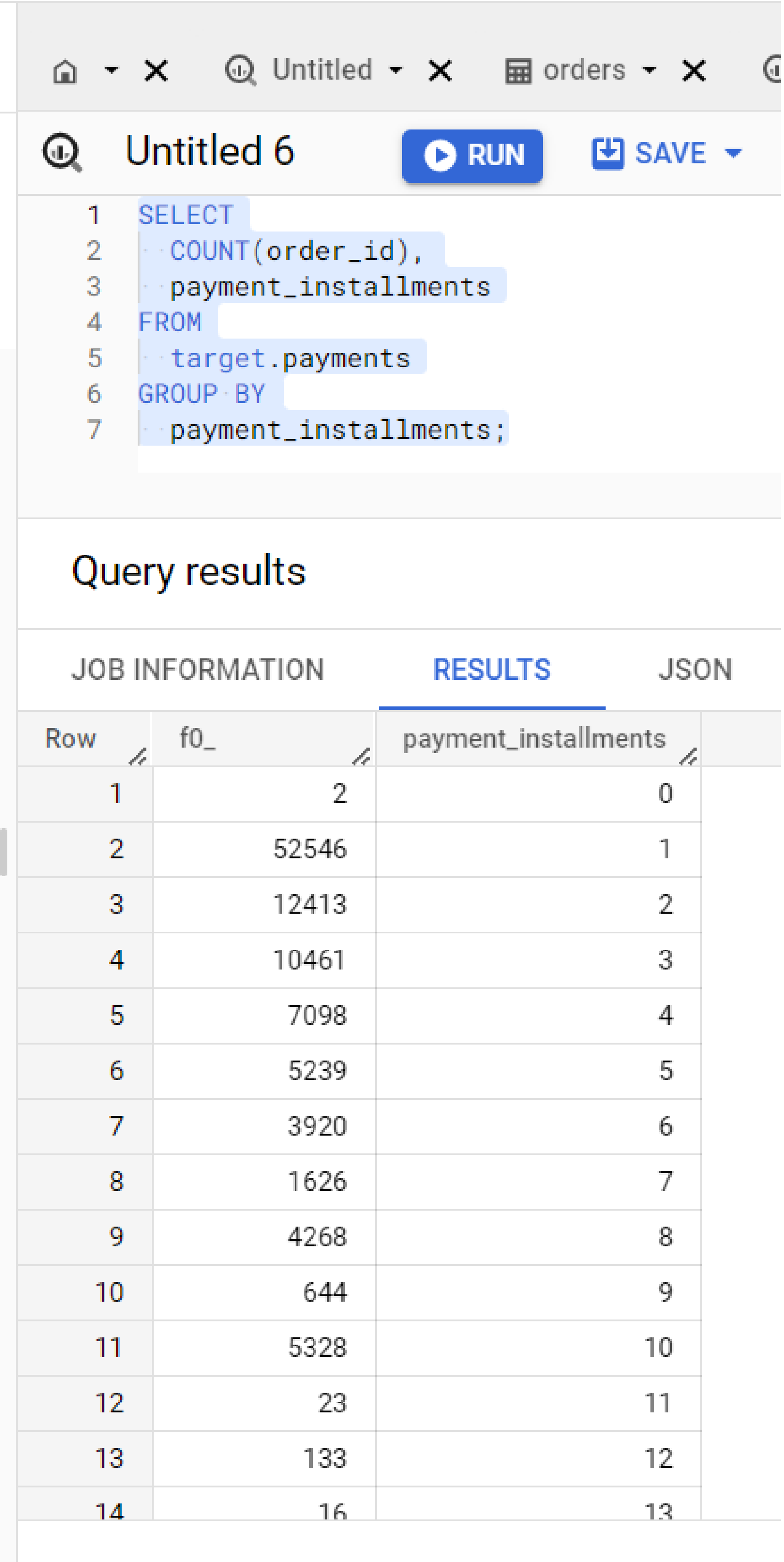
Query results

Row	payment_type	count_of_order	month_	year_	prev_count_of_order	Diff_count_of_order
1	credit_card	3	9	2016	*null*	*null*
2	voucher	23	10	2016	*null*	*null*
3	debit_card	2	10	2016	*null*	*null*
4	credit_card	254	10	2016	3	251
5	UPI	63	10	2016	*null*	*null*
6	credit_card	1	12	2016	254	-253
7	voucher	61	1	2017	23	38
8	debit_card	9	1	2017	2	7
9	credit_card	583	1	2017	1	582
10	UPI	197	1	2017	63	134
11	voucher	119	2	2017	61	58
12	debit_card	13	2	2017	9	4
13	credit_card	1356	2	2017	583	773
14	UPI	398	2	2017	197	201
15	voucher	200	3	2017	119	81
16	debit_card	31	3	2017	13	18

2. Count of orders based on the no. of payment installments



```
SELECT
  COUNT(order_id),
  payment_installments
FROM
  target.payments
GROUP BY
  payment_installments;
```



```
SELECT
  COUNT(order_id),
  payment_installments
FROM
  target.payments
GROUP BY
  payment_installments;
```

Query results

Row	f0_	payment_installments
1	2	0
2	52546	1
3	12413	2
4	10461	3
5	7098	4
6	5239	5
7	3920	6
8	1626	7
9	4268	8
10	644	9
11	5328	10
12	23	11
13	133	12
14	16	13