1.

```
1   SELECT customer_id, customer_city, customer_state
2   FROM olist_customers_dataset;
```

	customer_id	customer_city	customer_state
1	06b8999e2f…	franca	SP
2	18955e83d3…	sao …	SP
3	4e7b3e0028…	sao paulo	SP
4	b2b6027bc5…	mogi das …	SP
5	4f2d8ab171…	campinas	SP
6	879864dab9…	jaragua do…	SC
7	fd826e7cf6…	sao paulo	SP
8	5e274e7a0c…	timoteo	MG
9	5adf08e34b…	curitiba	PR
10	4b7139f345…	belo …	MG
11	9fb35e4ed6…	montes …	MG
12	5aa9e4fdd4…	rio de …	RJ

```
Execution finished without errors.
Result: 99441 rows returned in 164ms
At line 1:
SELECT customer_id, customer_city, customer_state
FROM olist_customers_dataset;
```

2.

SelectQuery.sql* | SQL 2*

```
1   SELECT customer_id, customer_city, customer_state
2   FROM olist_customers_dataset
3   WHERE customer_state = 'SP';
```

	customer_id	customer_city	customer_state
1	06b8999e2fba1a1fbc88172c00ba8bc7	franca	SP
2	18955e83d337fd6b2def6b18a428ac77	sao bernardo do campo	SP
3	4e7b3e00288586ebd08712fdd0374a03	sao paulo	SP
4	b2b6027bc5c5109e529d4dc6358b12c3	mogi das cruzes	SP
5	4f2d8ab171c80ec8364f7c12e35b23ad	campinas	SP
6	fd826e7cf63160e536e0908c76c3f441	sao paulo	SP
7	b2d1536598b73a9abd18e0d75d92f0a3	lencois paulista	SP
8	eabebad39a88bb6f5b52376faec28612	sao paulo	SP
9	206f3129c0e4d7d0b9550426023f0a08	piracicaba	SP
10	c5c61596a3b6bd0cee5766992c48a9a1	guarulhos	SP
11	9b8ce803689b3562defaad4613ef426f	sao paulo	SP
12	2938121a40a20953c43caa8c98787fcb	sao paulo	SP

```
Execution finished without errors.
Result: 41746 rows returned in 268ms
At line 1:
SELECT customer_id, customer_city, customer_state
FROM olist_customers_dataset
WHERE customer_state = 'SP';
```

3.

```sql
-- SELECT customer_id, customer_city, customer_state
-- FROM olist_customers_dataset
-- WHERE customer_state = 'SP';
SELECT order_id, payment_type, payment_value
FROM olist_order_payments_dataset
WHERE payment_value > 100;
```

	order_id	payment_type	payment_value
1	ba78997921bbcdc1373bb41e913ab953	credit_card	107.78
2	42fdf880ba16b47b59251dd489d4441a	credit_card	128.45
3	1f78449c87a54faf9e96e88ba1491fa9	credit_card	341.09
4	d88e0d5fa41661ce03cf6cf336527646	credit_card	188.73
5	2480f727e869fdeb397244a21b721b67	credit_card	141.9
6	cf95215a722f3ebf29e6bbab87a29e61	credit_card	102.66
7	769214176682788a92801d8907fa1b40	credit_card	105.28
8	12e5cfe0e4716b59afb0e0f4a3bd6570	credit_card	157.45
9	61059985a6fc0ad64e95d9944caacdad	credit_card	132.04
10	8ac09207f415d55acff302df7d6a895c	credit_card	244.15

Execution finished without errors.
Result: 51776 rows returned in 359ms
At line 1:
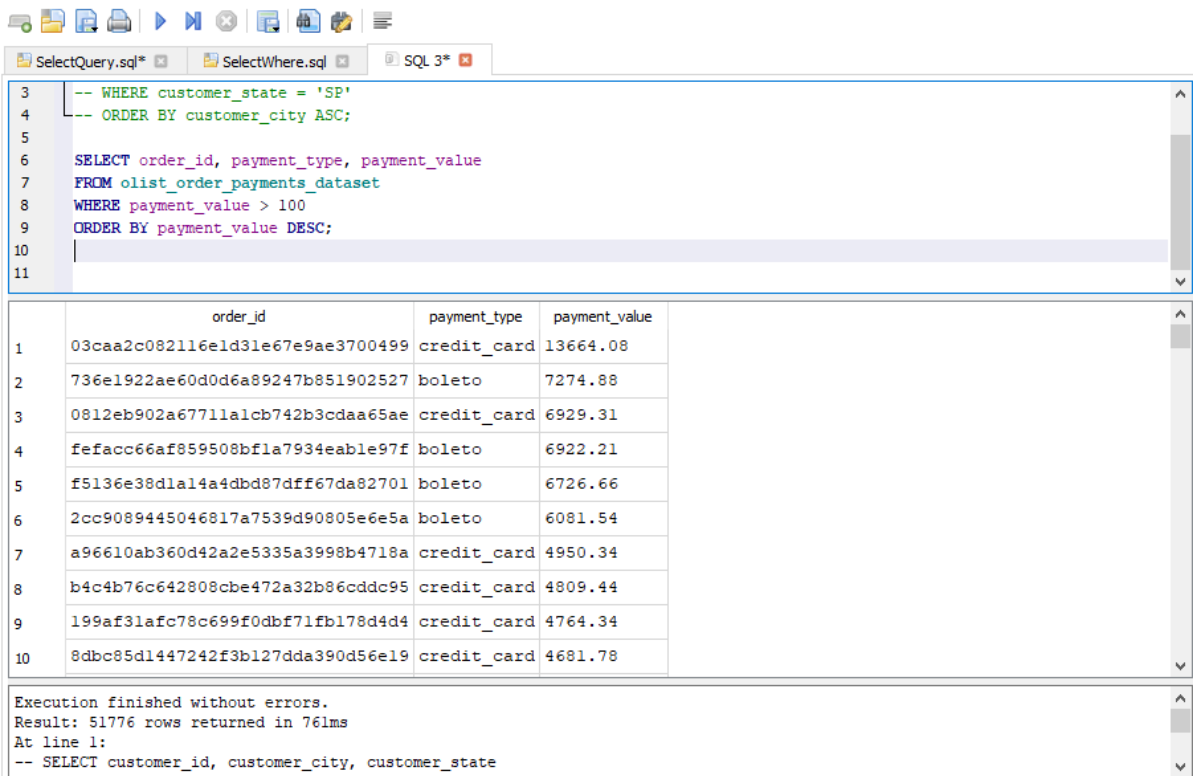-- SELECT customer_id, customer_city, customer_state

4.

```sql
SELECT customer_id, customer_city, customer_state
FROM olist_customers_dataset
WHERE customer_state = 'SP'
ORDER BY customer_city ASC;
```

	customer_id	customer_city	customer_state
1	ed35271185aa3ecf2e421970e47e473f	adamantina	SP
2	9c8238260ea546e75c56fc27c0fedfc8	adamantina	SP
3	f5219627819a30474a6ef14e1598e7f4	adamantina	SP
4	5684f8bf0ee27f2003ba2380c4ba8b08	adamantina	SP
5	cc6a744ba14a060493fb64b97087006c	adamantina	SP
6	9872961494c04c3939cc4fa43bfaeb75	adamantina	SP
7	4d32a98e390433a11d785b4078826807	adamantina	SP
8	370e9b111968bd747c429eb56c54c8e3	adamantina	SP
9	a54c7810d4a0a3563f11fb6ce6acf771	adamantina	SP
10	8d530bb376a32c1a88884c941bfa3789	adamantina	SP

Execution finished without errors.
Result: 41746 rows returned in 450ms
At line 1:
SELECT customer_id, customer_city, customer_state

5.

```sql
3   -- WHERE customer_state = 'SP'
4   -- ORDER BY customer_city ASC;
5
6   SELECT order_id, payment_type, payment_value
7   FROM olist_order_payments_dataset
8   WHERE payment_value > 100
9   ORDER BY payment_value DESC;
10
11
```
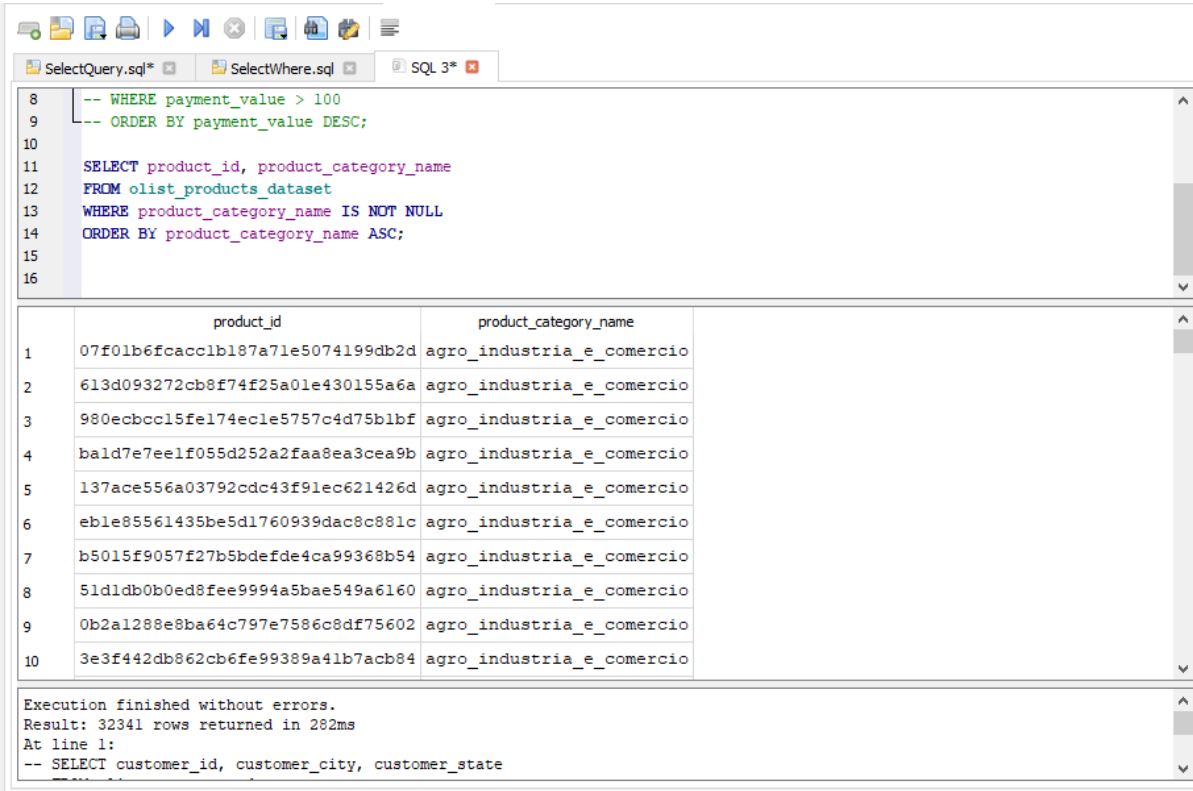
	order_id	payment_type	payment_value
1	03caa2c082116e1d31e67e9ae3700499	credit_card	13664.08
2	736e1922ae60d0d6a89247b851902527	boleto	7274.88
3	0812eb902a67711a1cb742b3cdaa65ae	credit_card	6929.31
4	fefacc66af859508bf1a7934eab1e97f	boleto	6922.21
5	f5136e38d1a14a4dbd87dff67da82701	boleto	6726.66
6	2cc9089445046817a7539d90805e6e5a	boleto	6081.54
7	a96610ab360d42a2e5335a3998b4718a	credit_card	4950.34
8	b4c4b76c642808cbe472a32b86cddc95	credit_card	4809.44
9	199af31afc78c699f0dbf71fb178d4d4	credit_card	4764.34
10	8dbc85d1447242f3b127dda390d56e19	credit_card	4681.78

```
Execution finished without errors.
Result: 51776 rows returned in 761ms
At line 1:
-- SELECT customer_id, customer_city, customer_state
```

6.

```sql
8    -- WHERE payment_value > 100
9    -- ORDER BY payment_value DESC;
10
11   SELECT product_id, product_category_name
12   FROM olist_products_dataset
13   WHERE product_category_name IS NOT NULL
14   ORDER BY product_category_name ASC;
15
16
```
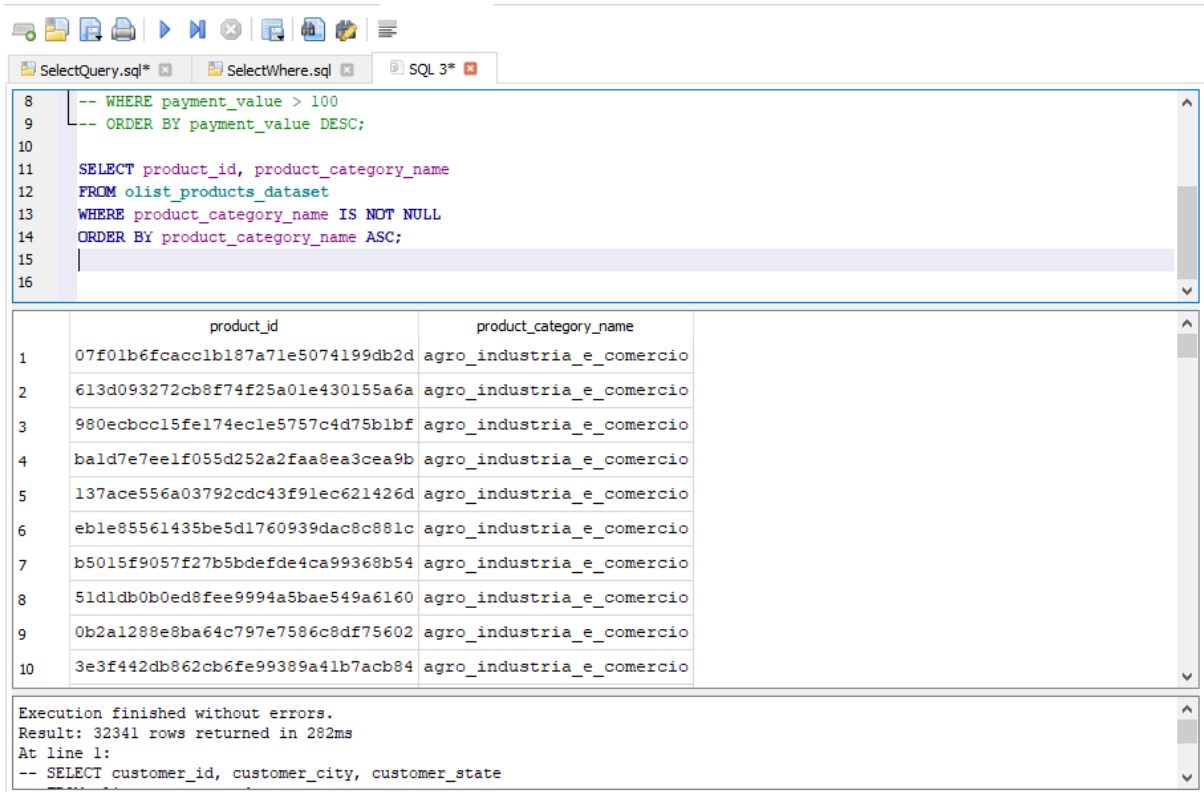
	product_id	product_category_name
1	07f01b6fcacc1b187a71e5074199db2d	agro_industria_e_comercio
2	613d093272cb8f74f25a01e430155a6a	agro_industria_e_comercio
3	980ecbcc15fe174ec1e5757c4d75b1bf	agro_industria_e_comercio
4	ba1d7e7ee1f055d252a2faa8ea3cea9b	agro_industria_e_comercio
5	137ace556a03792cdc43f91ec621426d	agro_industria_e_comercio
6	eb1e85561435be5d1760939dac8c881c	agro_industria_e_comercio
7	b5015f9057f27b5bdefde4ca99368b54	agro_industria_e_comercio
8	51d1db0b0ed8fee9994a5bae549a6160	agro_industria_e_comercio
9	0b2a1288e8ba64c797e7586c8df75602	agro_industria_e_comercio
10	3e3f442db862cb6fe99389a41b7acb84	agro_industria_e_comercio

```
Execution finished without errors.
Result: 32341 rows returned in 282ms
At line 1:
-- SELECT customer_id, customer_city, customer_state
```

7.

```
 8   -- WHERE payment_value > 100
 9   -- ORDER BY payment_value DESC;
10
11   SELECT product_id, product_category_name
12   FROM olist_products_dataset
13   WHERE product_category_name IS NOT NULL
14   ORDER BY product_category_name ASC;
15
16
```
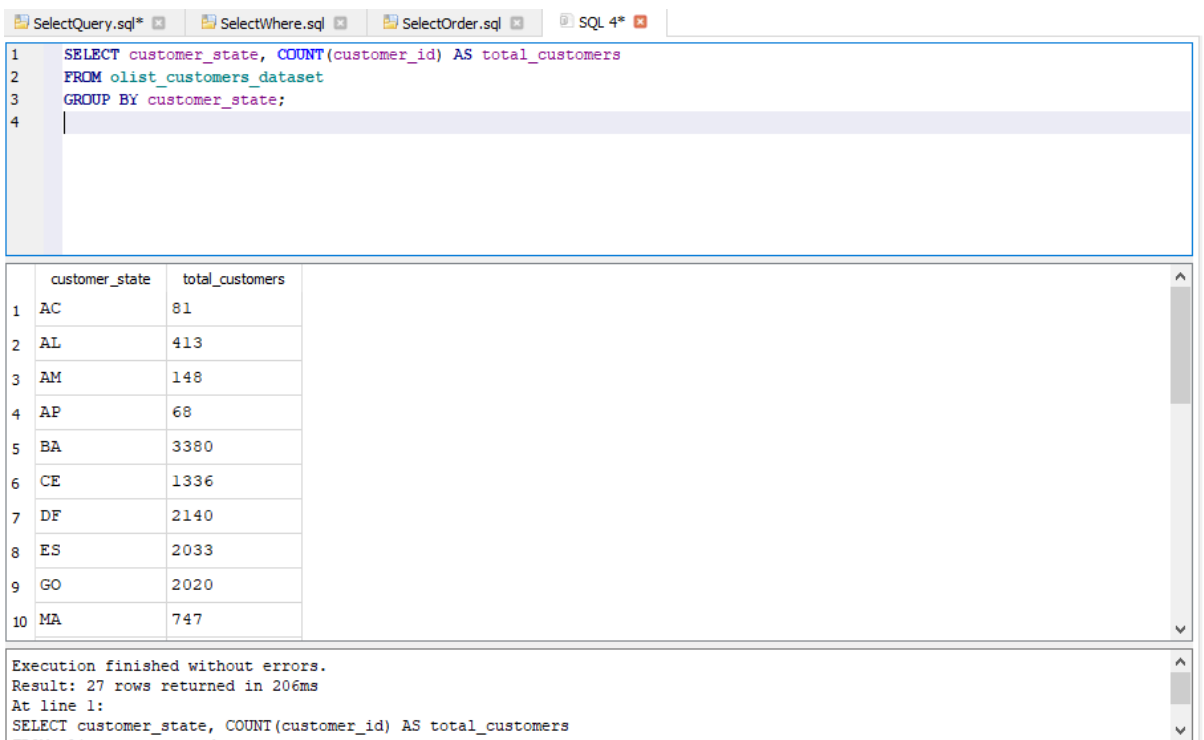
	product_id	product_category_name
1	07f01b6fcacc1b187a71e5074199db2d	agro_industria_e_comercio
2	613d093272cb8f74f25a01e430155a6a	agro_industria_e_comercio
3	980ecbcc15fe174ec1e5757c4d75b1bf	agro_industria_e_comercio
4	ba1d7e7ee1f055d252a2faa8ea3cea9b	agro_industria_e_comercio
5	137ace556a03792cdc43f91ec621426d	agro_industria_e_comercio
6	eb1e85561435be5d1760939dac8c881c	agro_industria_e_comercio
7	b5015f9057f27b5bdefde4ca99368b54	agro_industria_e_comercio
8	51d1db0b0ed8fee9994a5bae549a6160	agro_industria_e_comercio
9	0b2a1288e8ba64c797e7586c8df75602	agro_industria_e_comercio
10	3e3f442db862cb6fe99389a41b7acb84	agro_industria_e_comercio

```
Execution finished without errors.
Result: 32341 rows returned in 282ms
At line 1:
-- SELECT customer_id, customer_city, customer_state
```

8.

```
1   SELECT customer_state, COUNT(customer_id) AS total_customers
2   FROM olist_customers_dataset
3   GROUP BY customer_state;
4
```

	customer_state	total_customers
1	AC	81
2	AL	413
3	AM	148
4	AP	68
5	BA	3380
6	CE	1336
7	DF	2140
8	ES	2033
9	GO	2020
10	MA	747

```
Execution finished without errors.
Result: 27 rows returned in 206ms
At line 1:
SELECT customer_state, COUNT(customer_id) AS total_customers
```

9.

```
1    SELECT customer_state, COUNT(customer_id) AS total_customers
2    FROM olist_customers_dataset
3    GROUP BY customer_state;
4
5    SELECT payment_type, SUM(payment_value) AS total_payment
6    FROM olist_order_payments_dataset
7    GROUP BY payment_type;
8
```

	payment_type	total_payment
1	boleto	2869361.27
2	credit_card	12542084.19
3	debit_card	217989.79
4	not_defined	0.0
5	voucher	379436.87

```
Execution finished without errors.
Result: 5 rows returned in 212ms
At line 5:
SELECT payment_type, SUM(payment_value) AS total_payment
```

10.
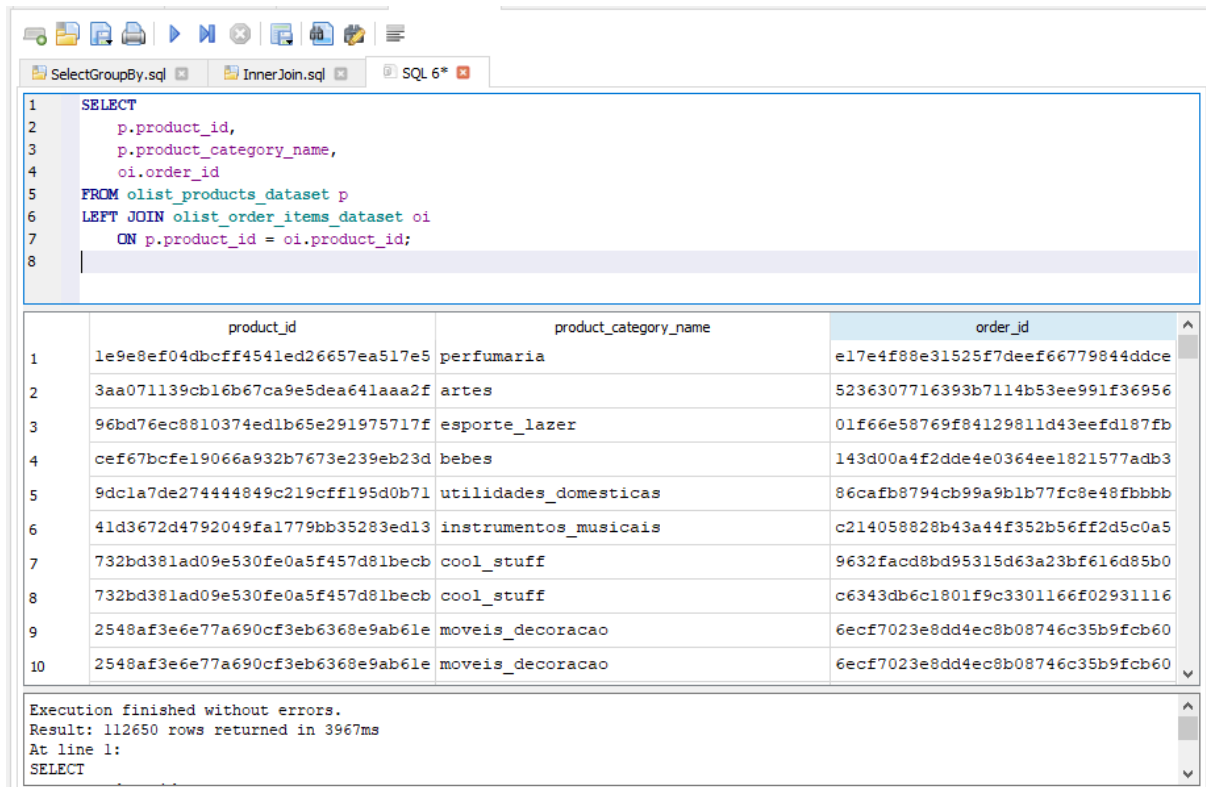
```
1    SELECT
2        oi.order_id,
3        oi.product_id,
4        p.product_category_name,
5        oi.price
6    FROM olist_order_items_dataset oi
7    INNER JOIN olist_products_dataset p
8        ON oi.product_id = p.product_id;
9
```

	order_id	product_id	product_category_name
1	00010242fe8c5a6d1ba2dd792cb16214	4244733e06e7ecb4970a6e2683c13e61	cool_stuff
2	00018f77f2f0320c557190d7a144bdd3	e5f2d52b802189ee658865ca93d83a8f	pet_shop
3	000229ec398224ef6ca0657da4fc703e	c777355d18b72b67abbeef9df44fd0fd	moveis_decoracao
4	00024acbcdf0a6daa1e931b038114c75	7634da152a4610f1595efa32f14722fc	perfumaria
5	00042b26cf59d7ce69dfabb4e55b4fd9	ac6c3623068f30de03045865e4e10089	ferramentas_jardim
6	00048cc3ae777c65dbb7d2a0634bc1ea	ef92defde845ab8450f9d70c526ef70f	utilidades_domesticas
7	00054e8431b9d7675808bcb819fb4a32	8d4f2bb7e93e6710a28f34fa83ee7d28	telefonia
8	000576fe39319847cbb9d288c5617fa6	557d850972a7d6f792fd18ae1400d9b6	ferramentas_jardim
9	0005a1a1728c9d785b8e2b08b904576c	310ae3c140ff94b03219ad0adc3c778f	beleza_saude

```
Execution finished without errors.
Result: 112650 rows returned in 1189ms
At line 1:
SELECT
```

11.

```sql
SELECT
    p.product_id,
    p.product_category_name,
    oi.order_id
FROM olist_products_dataset p
LEFT JOIN olist_order_items_dataset oi
    ON p.product_id = oi.product_id;
```

	product_id	product_category_name	order_id
1	1e9e8ef04dbcff4541ed26657ea517e5	perfumaria	e17e4f88e31525f7deef66779844ddce
2	3aa071139cb16b67ca9e5dea641aaa2f	artes	5236307716393b7114b53ee991f36956
3	96bd76ec8810374ed1b65e291975717f	esporte_lazer	01f66e58769f84129811d43eefd187fb
4	cef67bcfe19066a932b7673e239eb23d	bebes	143d00a4f2dde4e0364ee1821577adb3
5	9dc1a7de274444849c219cff195d0b71	utilidades_domesticas	86cafb8794cb99a9b1b77fc8e48fbbbb
6	41d3672d4792049fa1779bb35283ed13	instrumentos_musicais	c214058828b43a44f352b56ff2d5c0a5
7	732bd381ad09e530fe0a5f457d81becb	cool_stuff	9632facd8bd95315d63a23bf616d85b0
8	732bd381ad09e530fe0a5f457d81becb	cool_stuff	c6343db6c1801f9c3301166f02931116
9	2548af3e6e77a690cf3eb6368e9ab61e	moveis_decoracao	6ecf7023e8dd4ec8b08746c35b9fcb60
10	2548af3e6e77a690cf3eb6368e9ab61e	moveis_decoracao	6ecf7023e8dd4ec8b08746c35b9fcb60

```
Execution finished without errors.
Result: 112650 rows returned in 3967ms
At line 1:
SELECT
```

```
1    SELECT order_id, payment_value
2    FROM olist_order_payments_dataset
3    WHERE payment_value = (
4        SELECT MAX(payment_value)
5        FROM olist_order_payments_dataset
6    );
7
```

order_id	payment_value
1 03caa2c082116e1d31e67e9ae3700499	13664.08

```
Execution finished without errors.
Result: 1 rows returned in 117ms
At line 1:
SELECT order_id, payment_value
FROM olist_order_payments_dataset
WHERE payment_value = (
```

12.

13.

```
SELECT
    SUM(payment_value) AS total_revenue
FROM olist_order_payments_dataset;
```

	total_revenue
1	16008872.12

```
Execution finished without errors.
Result: 1 rows returned in 53ms
At line 1:
SELECT
    SUM(payment_value) AS total_revenue
FROM olist_order_payments_dataset;
```

14.

```
SELECT
    AVG(payment_value) AS avg_payment_value
FROM olist_order_payments_dataset;
```

	avg_payment_value
	154.100380416996

```
Execution finished without errors.
Result: 1 rows returned in 58ms
At line 6:
SELECT
    AVG(payment_value) AS avg_payment_value
FROM olist_order_payments_dataset;
```

15.

```
9
10    SELECT
11        payment_type,
12        SUM(payment_value) AS total_payment
13    FROM olist_order_payments_dataset
14    GROUP BY payment_type;
15
```

	payment_type	total_payment
1	boleto	2869361.27
2	credit_card	12542084.19
3	debit_card	217989.79
4	not_defined	0.0
5	voucher	379436.87

```
Execution finished without errors.
Result: 5 rows returned in 229ms
At line 10:
SELECT
    payment_type,
    SUM(payment_value) AS total_payment
FROM olist_order_payments_dataset
GROUP BY payment_type;
```

16.

Subquery.sql   AggregatteFunctions.sql   SQL 3*
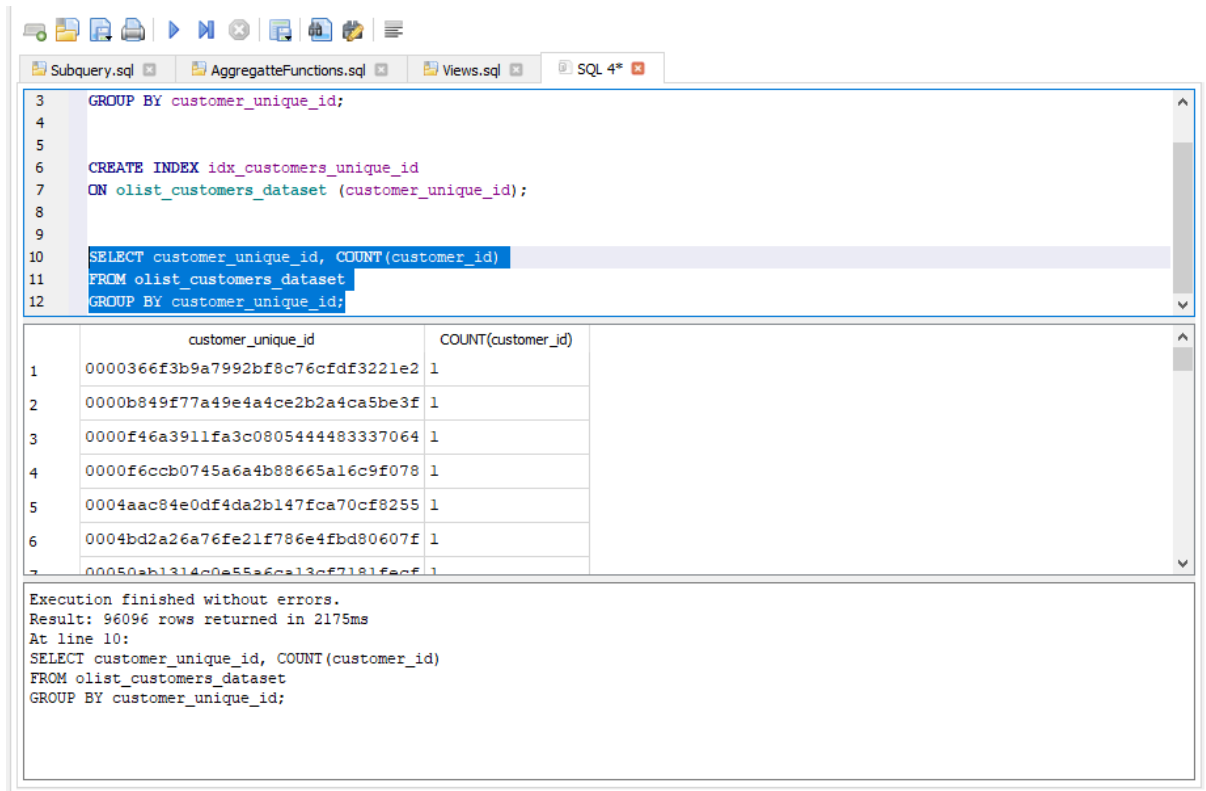
```
1    CREATE VIEW vw_product_sales AS
2      SELECT
3          product_id,
4          SUM(price) AS total_product_sales
5      FROM olist_order_items_dataset
6      GROUP BY product_id;
7
8      SELECT * FROM  vw_product_sales;
9
10
```

	product_id	total_product_sales
1	00066f42aeeb9f3007548bb9d3f33c38	101.65
2	00088930e925c41fd95ebfe695fd2655	129.9
3	0009406fd7479715e4bef61dd91f2462	229.0
4	000b8f95fcb9e0096488278317764d19	117.8
5	000d9be29b5207b54e86aa1b1ac54872	199.0
6	0011c512eb256aa0dbbb544d8dffcf6e	52.0
7	00126f27c813603687e6ce486d909d01	498.0

```
Execution finished without errors.
Result: 32951 rows returned in 493ms
At line 8:
SELECT * FROM  vw_product_sales;
```

17.

```sql
 3    GROUP BY customer_unique_id;
 4
 5
 6    CREATE INDEX idx_customers_unique_id
 7    ON olist_customers_dataset (customer_unique_id);
 8
 9
10    SELECT customer_unique_id, COUNT(customer_id)
11    FROM olist_customers_dataset
12    GROUP BY customer_unique_id;
```

	customer_unique_id	COUNT(customer_id)
1	0000366f3b9a7992bf8c76cfdf3221e2	1
2	0000b849f77a49e4a4ce2b2a4ca5be3f	1
3	0000f46a3911fa3c0805444483337064	1
4	0000f6ccb0745a6a4b88665a16c9f078	1
5	0004aac84e0df4da2b147fca70cf8255	1
6	0004bd2a26a76fe21f786e4fbd80607f	1
7	00050ab1314c0e55afca13cf7181fecf	1

```
Execution finished without errors.
Result: 96096 rows returned in 2175ms
At line 10:
SELECT customer_unique_id, COUNT(customer_id)
FROM olist_customers_dataset
GROUP BY customer_unique_id;
```