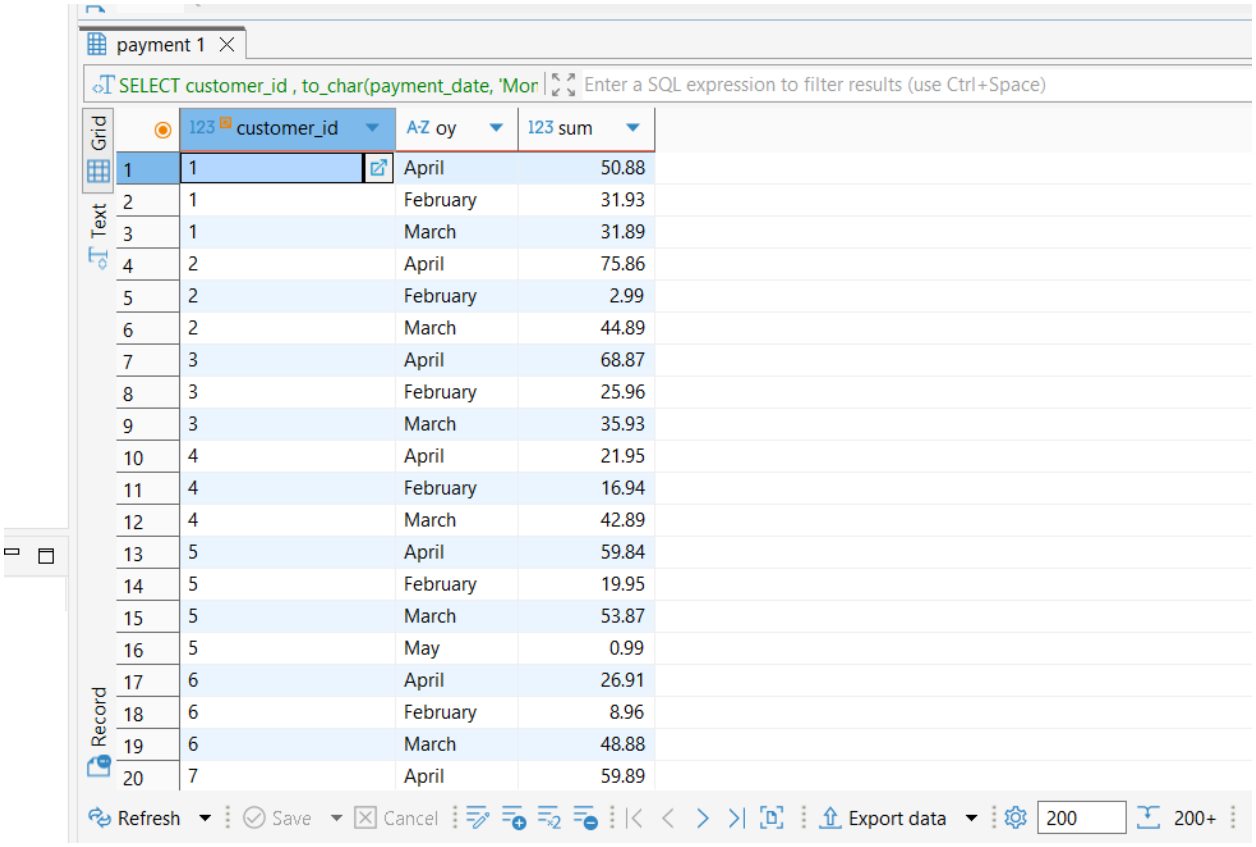
SQL Grouping date

```
1.SELECT
        customer_id ,
        to_char(payment_date, 'Month') AS OY,
        SUM(amount)
FROM payment
GROUP BY OY , customer_id
ORDER BY customer_id
```

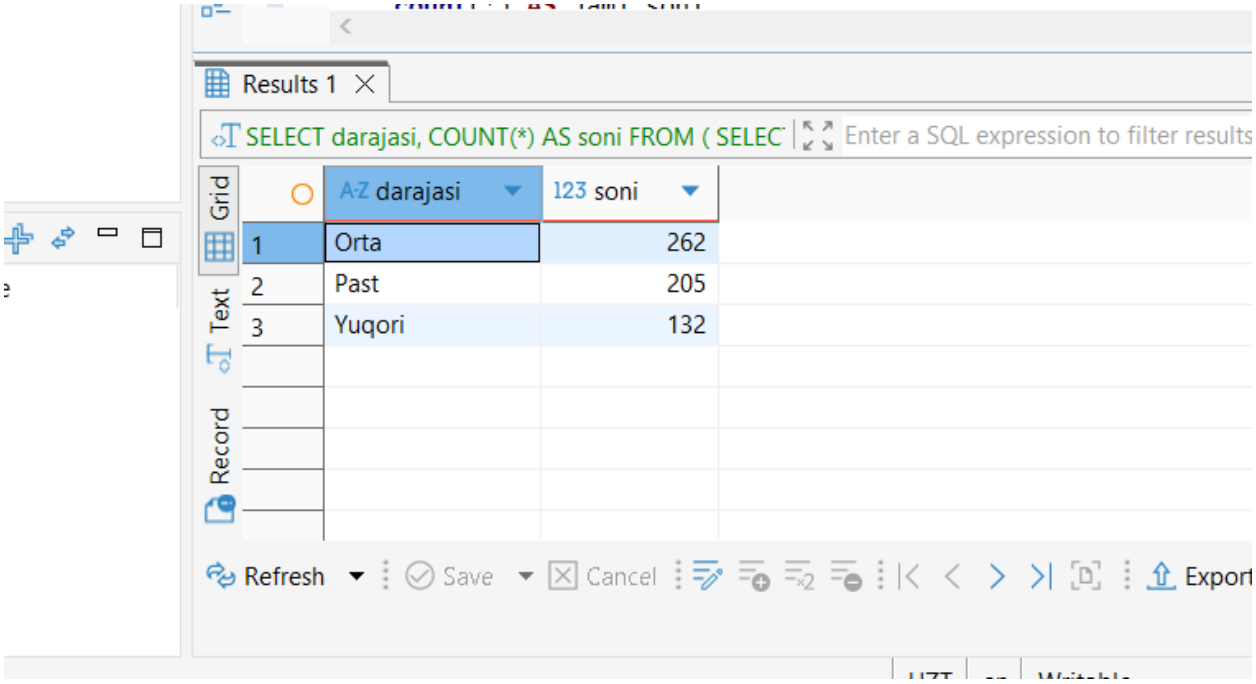
Izzoh: mijozlarning har oyda qancha umumiy summa ishlatganini chiqaradigan query



	customer_id	oy	sum
1	1	April	50.88
2	1	February	31.93
3	1	March	31.89
4	2	April	75.86
5	2	February	2.99
6	2	March	44.89
7	3	April	68.87
8	3	February	25.96
9	3	March	35.93
10	4	April	21.95
11	4	February	16.94
12	4	March	42.89
13	5	April	59.84
14	5	February	19.95
15	5	March	53.87
16	5	May	0.99
17	6	April	26.91
18	6	February	8.96
19	6	March	48.88
20	7	April	59.89

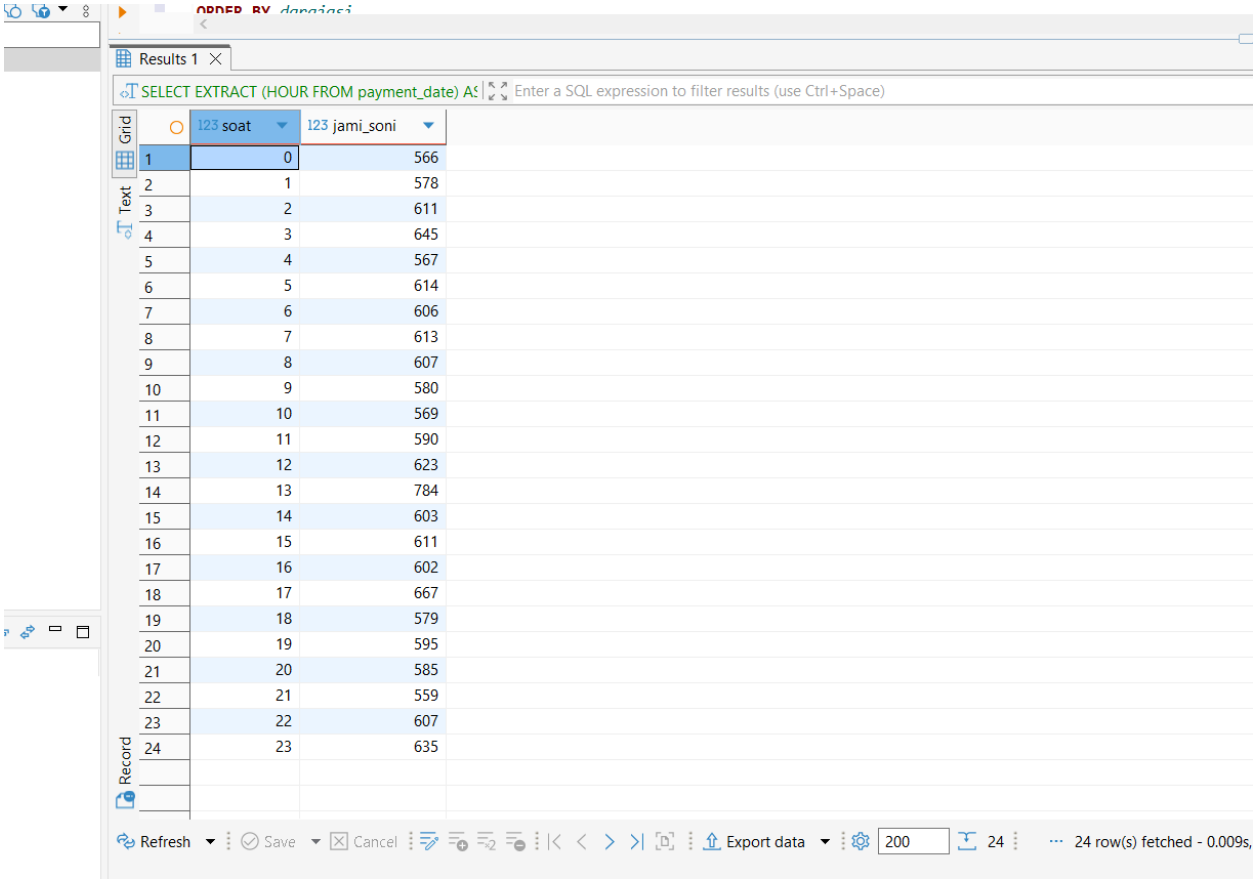
2.
```
SELECT
        darajasi,
        COUNT(*) AS soni
FROM (
        SELECT
                customer_id,
                SUM(amount) AS jami_summa,
                CASE
                        WHEN SUM(amount) < 90 THEN 'Past'
                        WHEN SUM(amount) BETWEEN 90 AND 120 THEN 'Orta'
                        ELSE 'Yuqori'
                END AS darajasi
        FROM payment
        GROUP BY customer_id
) AS mijoz_toifalari
GROUP BY darajasi
ORDER BY darajasi
```

Izoh: mijozning tolagan summasiga qarab uni guruhga ajratib keyin esa osha guruhda nechta customer borligini chiqaradigan query



3.
```
SELECT
        EXTRACT (HOUR FROM payment_date) AS soat,
        count(*) AS jami_soni
FROM payment
GROUP BY soat
ORDER BY soat
```

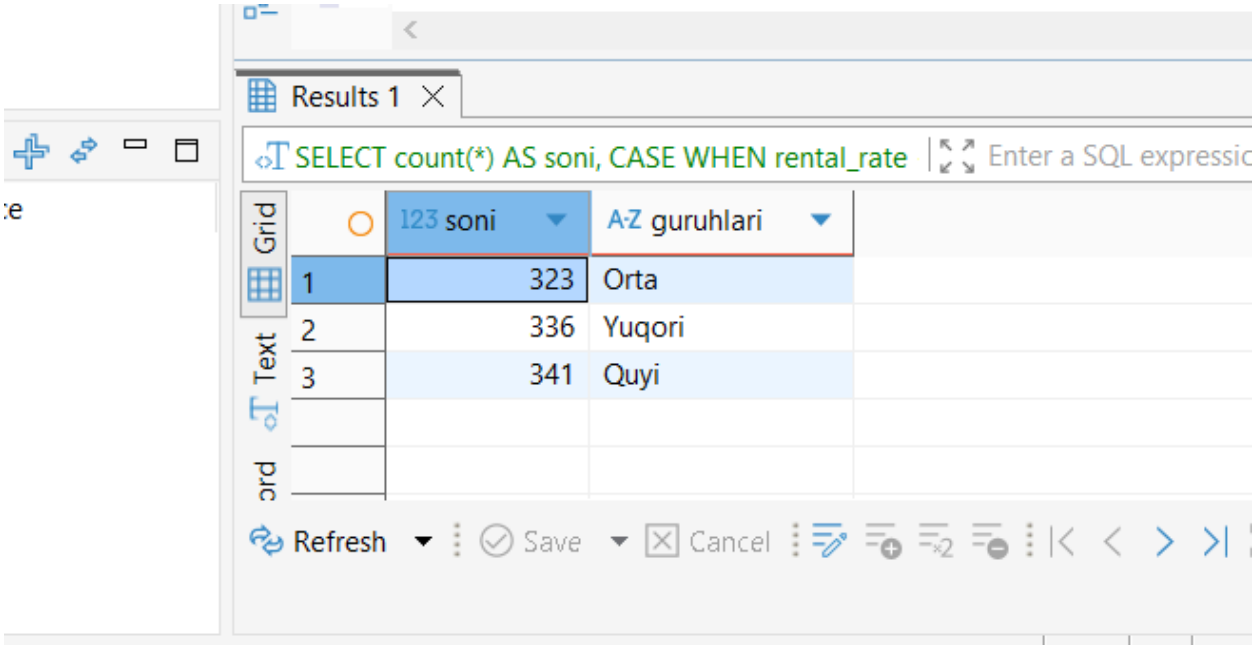
Izoh: har soatda nechta mijoz ijaraga olganii chiqaradigan query



	soat	jami_soni
1	0	566
2	1	578
3	2	611
4	3	645
5	4	567
6	5	614
7	6	606
8	7	613
9	8	607
10	9	580
11	10	569
12	11	590
13	12	623
14	13	784
15	14	603
16	15	611
17	16	602
18	17	667
19	18	579
20	19	595
21	20	585
22	21	559
23	22	607
24	23	635

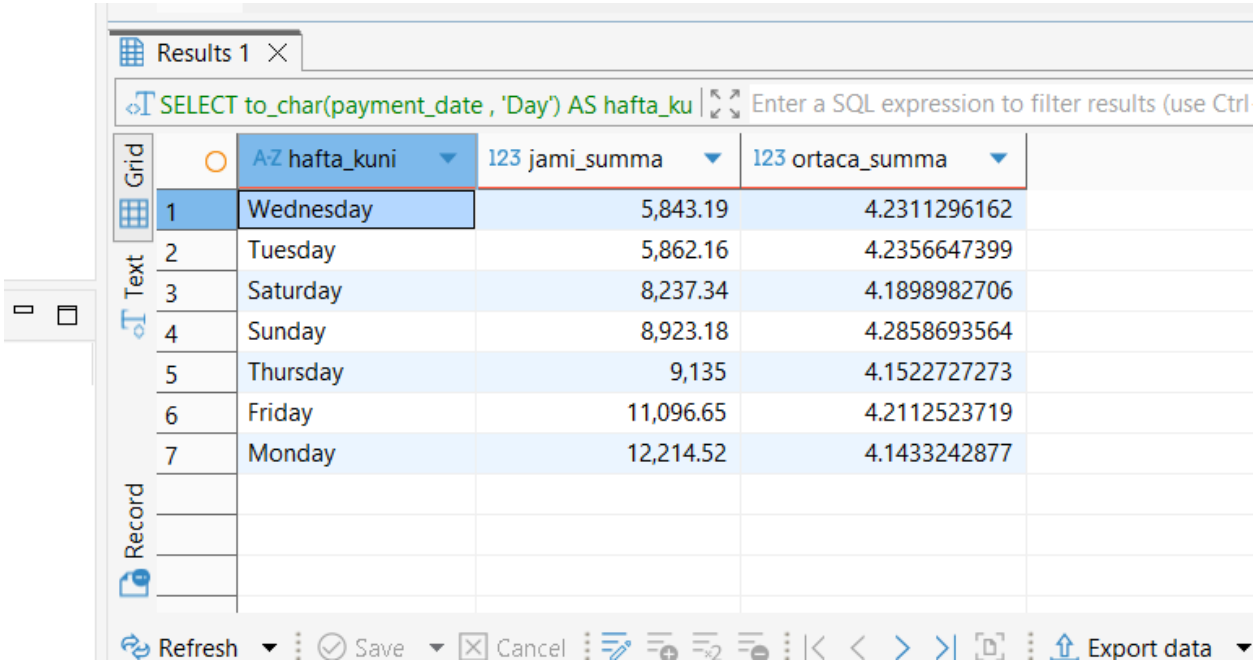
4.
```
SELECT
        count(*) AS soni,
        CASE
                WHEN rental_rate < 1.00 THEN 'Quyi'
                WHEN rental_rate BETWEEN 1.00 AND 2.99 THEN 'Orta'
                ELSE 'Yuqori'
        END AS guruhlari
FROM film
GROUP BY guruhlari
```

Izoh: ijaraga berilgan filmlarning ijara narxi boyicha guruhlarga ajratadigan query



5.
```
SELECT
        to_char(payment_date , 'Day') AS hafta_kuni,
        SUM(amount) AS jami_summa,
        AVG(amount) AS ortaca_summa
FROM payment
GROUP BY hafta_kuni
HAVING sum(amount) > 5000
ORDER BY jami_summa
```

Izoh: qaysi hafta kunida qancha savdo bolganini chiqaradigan query faqat 5000 dan balandlari uchun

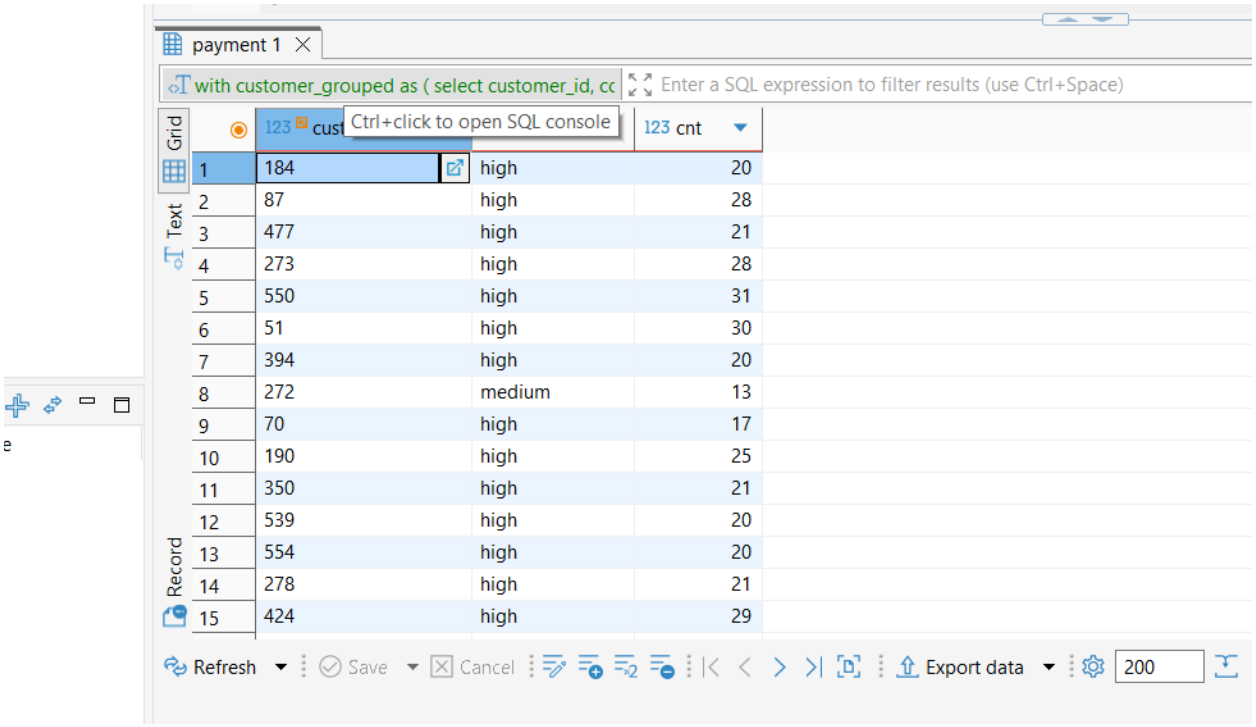


6.
```sql
with customer_grouped as (
  select customer_id, count(*) cnt from payment
  group by customer_id
)
select customer_id,
     CASE WHEN cnt between 1 and 5 THEN 'low'
         WHEN cnt between 6 and 15 THEN 'medium'
         ELSE 'high'
     end as toifalar,
     cnt
from customer_grouped;
```

izoh : yordamchi utoz yordamida qilingan vazifa

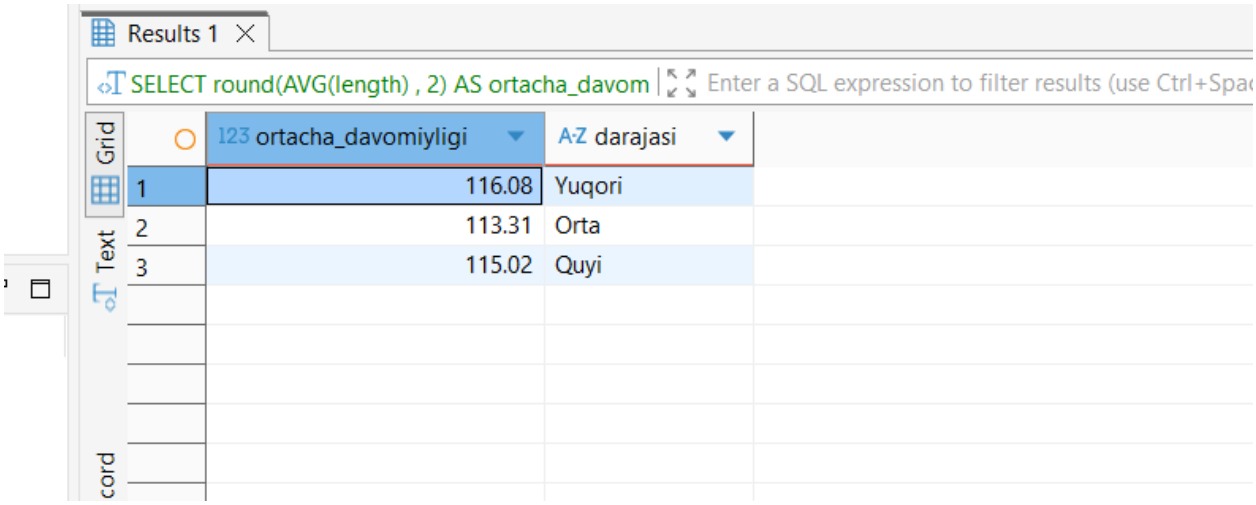
```sql
SELECT
 darajasi,
 COUNT(*) AS soni
FROM (
 SELECT
  customer_id,
  CASE
   WHEN count(amount) BETWEEN 1 AND 5 THEN 'quyi'
   WHEN count(amount) BETWEEN 6 AND 15 THEN 'orta'
   ELSE 'yuqori'
  END AS darajasi
  FROM payment
  GROUP BY customer_id
) AS tolov_soni
GROUP BY darajasi
```

Izoh: subqueryda yozilgan kod


payment 1
with customer_grouped as (select customer_id, cc
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
Record
123 cust
Ctrl+click to open SQL console
123 cnt
1 184 high 20
2 87 high 28
3 477 high 21
4 273 high 28
5 550 high 31
6 51 high 30
7 394 high 20
8 272 medium 13
9 70 high 17
10 190 high 25
11 350 high 21
12 539 high 20
13 554 high 20
14 278 high 21
15 424 high 29
Refresh
Save
Cancel
Export data
200

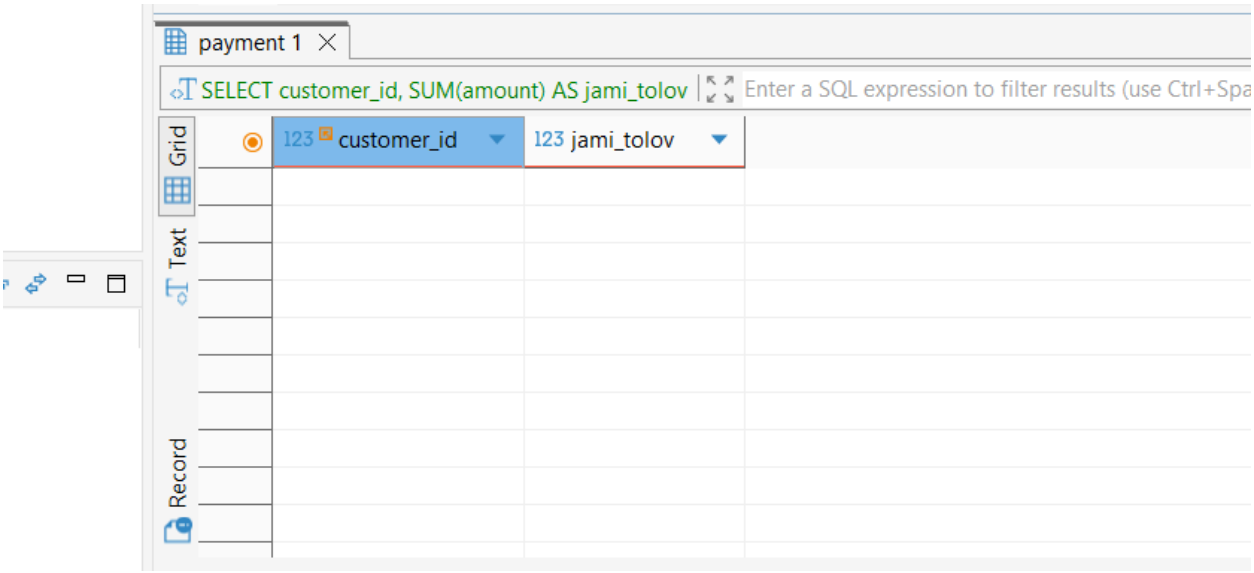
7.
```
SELECT
        round(AVG(length) , 2) AS ortacha_davomiyligi,
        CASE
                WHEN replacement_cost < 15 THEN 'Quyi'
                WHEN replacement_cost BETWEEN 16 AND 20 THEN 'Orta'
                ELSE 'Yuqori'
        END AS darajasi
FROM film
GROUP  BY
        CASE
                WHEN replacement_cost < 15 THEN 'Quyi'
                WHEN replacement_cost BETWEEN 16 AND 20 THEN 'Orta'
                ELSE 'Yuqori'
        END
```

Izoh: replacement_cost boyicha 3 ta guruha bolib olinib keyin ularni ortacha uzunligi chiqaradigan query



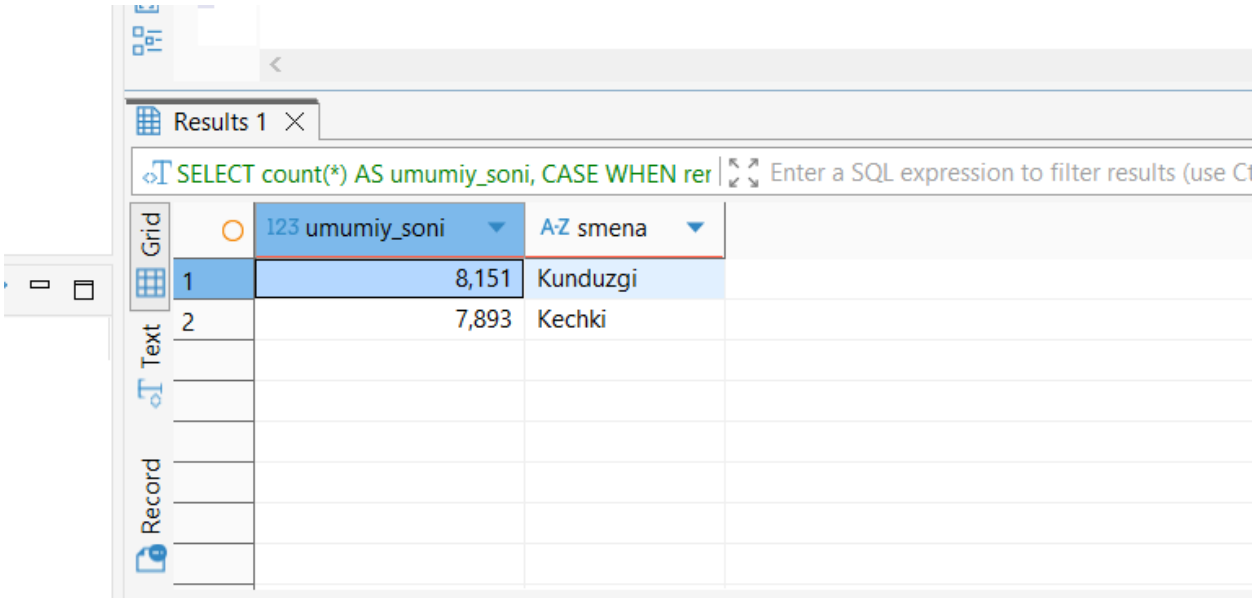
8.
```
SELECT
  customer_id,
  SUM(amount) AS jami_tolov
FROM payment
WHERE TO_CHAR(payment_date, 'YYYY-MM') = TO_CHAR(CURRENT_DATE - INTERVAL '1 month',
'YYYY-MM')
GROUP BY customer_id
ORDER BY jami_tolov DESC
LIMIT 5;
```

Izoh: databaseda otgan oyda sotuv bolmagan database eski



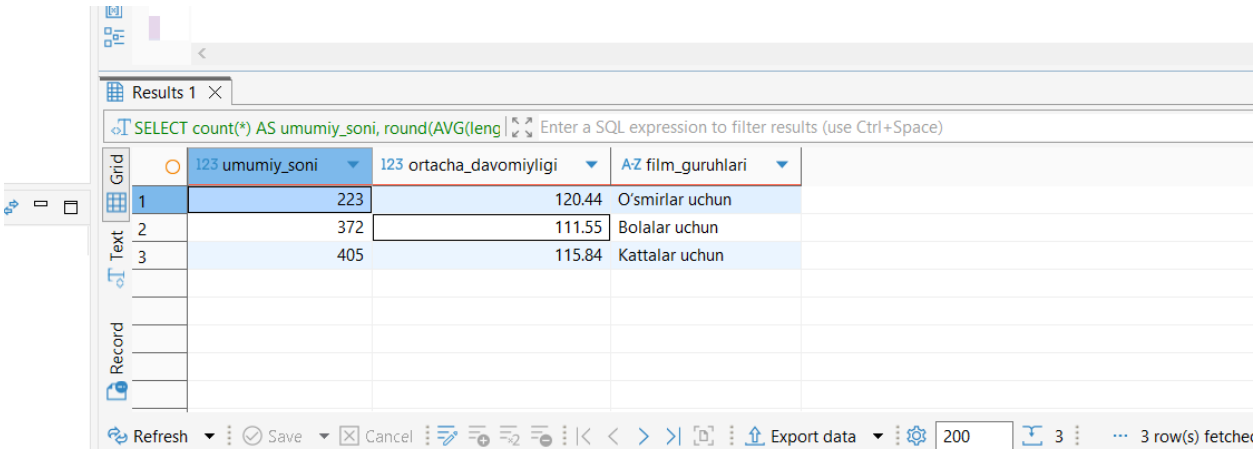
9.
```
SELECT
        count(*) AS umumiy_soni,
        CASE
                WHEN rental_date::time BETWEEN TIME '08:00' AND TIME '19:59' THEN 'Kunduzgi'
               ELSE 'Kechki'
        END AS smena
FROM rental
GROUP BY
        CASE
                WHEN rental_date::time BETWEEN TIME '08:00' AND TIME '19:59' THEN 'Kunduzgi'
               ELSE 'Kechki'
        END
```

Izoh: bunda kechki va kundizgi smenalarda har birida qancha ijara amalga oshganini chiqaradigan query

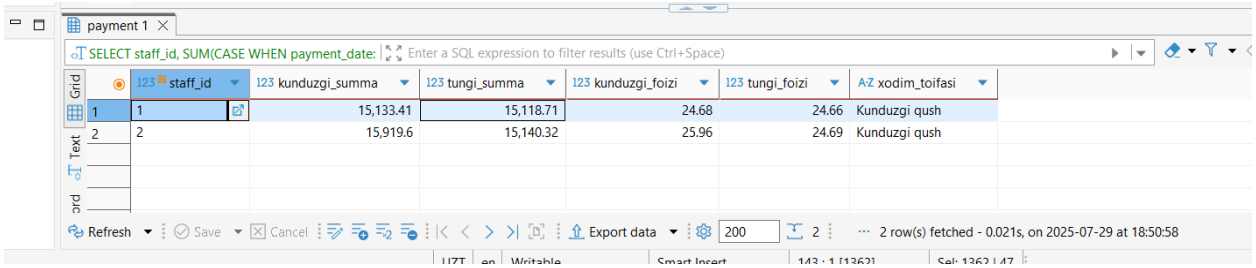


10.
```
SELECT
        count(*) AS umumiy_soni,
        round(AVG(length) , 2) AS ortacha_davomiyligi,
        CASE
                WHEN rating IN ('G', 'PG') THEN 'Bolalar uchun'
                WHEN rating = 'PG-13' THEN 'O‘smirlar uchun'
                ELSE 'Kattalar uchun'
        END AS film_guruhlari
FROM film
GROUP BY
        CASE
                WHEN rating IN ('G', 'PG') THEN 'Bolalar uchun'
                WHEN rating = 'PG-13' THEN 'O‘smirlar uchun'
                ELSE 'Kattalar uchun'
        END;
```

Izoh: filmni reytingi boyicha guruhlarga bolish buni internetdan olgan malumotlarim boyicha bolib chiqdim va undagi film uzunligi va umumiy sonini chiqaradigan query



11.
```sql
SELECT
  staff_id,
  SUM(CASE
        WHEN payment_date::time BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
        ELSE 0
      END) AS kunduzgi_summa,
  SUM(CASE
        WHEN payment_date::time NOT BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
        ELSE 0
      END) AS tungi_summa,
  ROUND(
      SUM(CASE
            WHEN payment_date::time BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
            ELSE 0
          END) * 100.0 /
      (SELECT SUM(amount) FROM payment),
      2
  ) AS kunduzgi_foizi,
  ROUND(
      SUM(CASE
            WHEN payment_date::time NOT BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
            ELSE 0
          END) * 100.0 /
      (SELECT SUM(amount) FROM payment),
      2
  ) AS tungi_foizi,
  CASE
      WHEN
          SUM(CASE
                WHEN payment_date::time BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
                ELSE 0
              END) >
          SUM(CASE
                WHEN payment_date::time NOT BETWEEN TIME '08:00' AND TIME '19:59' THEN amount
                ELSE 0
              END)
      THEN 'Kunduzgi qush'
      ELSE 'Tungi ukki'
  END AS xodim_toifasi
FROM payment
GROUP BY staff_id
ORDER BY staff_id;
```


payment 1
SELECT staff_id, SUM(CASE WHEN payment_date:
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
grid
123 staff_id
123 kunduzgi_summa
123 tungi_summa
123 kunduzgi_foizi
123 tungi_foizi
AZ xodim_toifasi
1 1 15,133.41 15,118.71 24.68 24.66 Kunduzgi qush
2 2 15,919.6 15,140.32 25.96 24.69 Kunduzgi qush
Refresh
Save
Cancel
Export data
200
2
2 row(s) fetched - 0.021s, on 2025-07-29 at 18:50:58