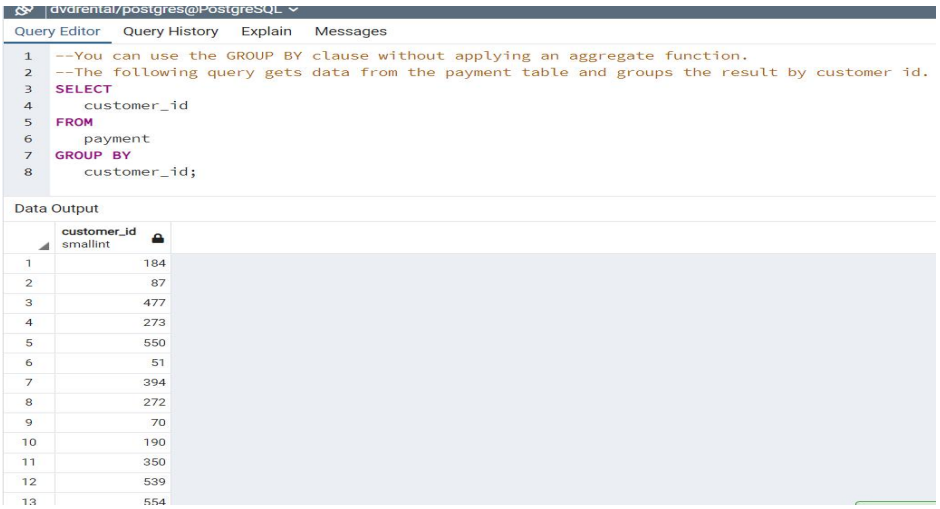
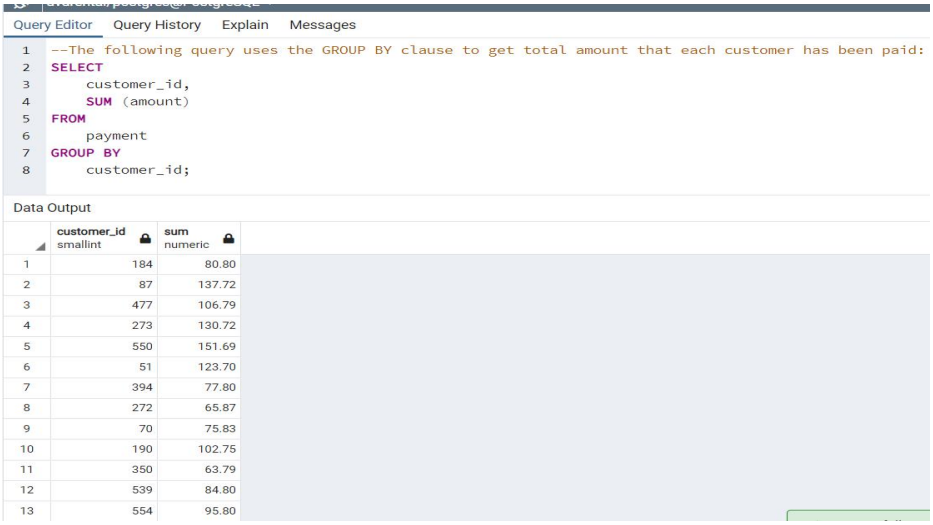
PostgreSQL GROUP BY



```
--You can use the GROUP BY clause without applying an aggregate function.
--The following query gets data from the payment table and groups the result by customer id.
SELECT
    customer_id
FROM
    payment
GROUP BY
    customer_id;
```

Data Output

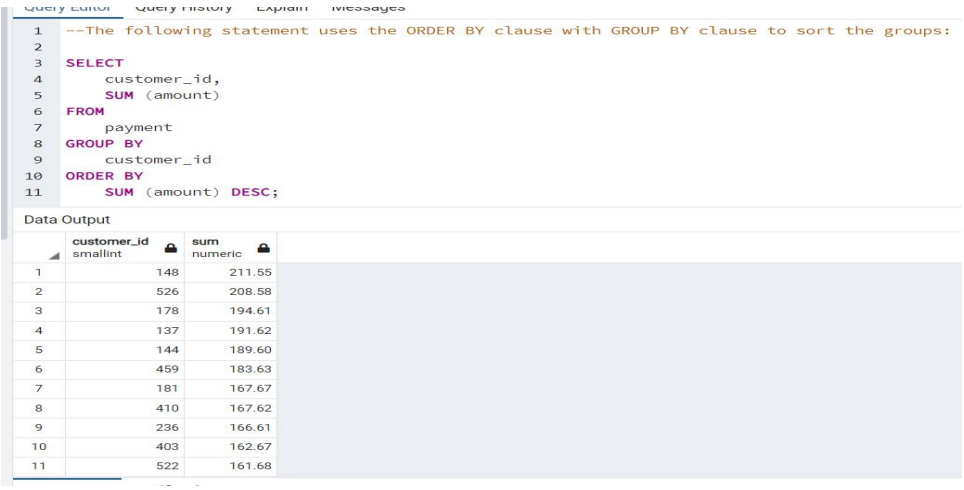
	customer_id smallint
1	184
2	87
3	477
4	273
5	550
6	51
7	394
8	272
9	70
10	190
11	350
12	539
13	554



```
--The following query uses the GROUP BY clause to get total amount that each customer has been paid:
SELECT
    customer_id,
    SUM (amount)
FROM
    payment
GROUP BY
    customer_id;
```

Data Output

	customer_id smallint	sum numeric
1	184	80.80
2	87	137.72
3	477	106.79
4	273	130.72
5	550	151.69
6	51	123.70
7	394	77.80
8	272	65.87
9	70	75.83
10	190	102.75
11	350	63.79
12	539	84.80
13	554	95.80



```
--The following statement uses the ORDER BY clause with GROUP BY clause to sort the groups:

SELECT
    customer_id,
    SUM (amount)
FROM
    payment
GROUP BY
    customer_id
ORDER BY
    SUM (amount) DESC;
```

Data Output

	customer_id smallint	sum numeric
1	148	211.55
2	526	208.58
3	178	194.61
4	137	191.62
5	144	189.60
6	459	183.63
7	181	167.67
8	410	167.62
9	236	166.61
10	403	162.67
11	522	161.68

Query Editor | Query History | Explain | Messages

```sql
--this query joins the payment table with the customer table and group customers by their names.

SELECT
    first_name || ' ' || last_name full_name,
    SUM (amount) amount
FROM
    payment
INNER JOIN customer USING (customer_id)
GROUP BY
    full_name
ORDER BY amount DESC;
```

Data Output

	full_name text	amount numeric
1	Eleanor Hunt	211.55
2	Karl Seal	208.58
3	Marion Snyder	194.61
4	Rhonda Kennedy	191.62
5	Clara Shaw	189.60
6	Tommy Collazo	183.63
7	Ana Bradley	167.67
8	Curtis Irby	167.62
9	Marcia Dean	166.61
10	Mike Way	162.67
11	Arnold Havens	161.68

dvdrental/postgres@PostgreSQL

Query Editor | Query History | Explain | Messages

```sql
--Using PostgreSQL GROUP BY with COUNT
SELECT
    staff_id,
    COUNT (payment_id)
FROM
    payment
GROUP BY
    staff_id;
```

Data Output

	staff_id smallint	count bigint
1	1	7292
2	2	7304

Query Editor | Query History | Explain | Messages

```sql
--Using PostgreSQL GROUP BY with multiple columns

SELECT
    customer_id,
    staff_id,
    SUM(amount)
FROM
    payment
GROUP BY
    staff_id,
    customer_id
ORDER BY
    customer_id;
```

Data Output

	customer_id smallint	staff_id smallint	sum numeric
1	1	2	53.85
2	1	1	60.85
3	2	2	67.88
4	2	1	55.86
5	3	1	59.88
6	3	2	70.88
7	4	2	31.90
8	4	1	49.88
9	5	1	63.86

Query Editor | Query History | Explain | Messages

```
1  --Using PostgreSQL GROUP BY clause with date column
2
3  SELECT
4       DATE(payment_date) paid_date,
5       SUM(amount) sum
6  FROM
7       payment
8  GROUP BY
9       DATE(payment_date);
```

Data Output

	paid_date date	sum numeric
1	2007-02-14	116.73
2	2007-02-19	1290.90
3	2007-02-20	1219.09
4	2007-03-19	2617.69
5	2007-04-26	347.21
6	2007-04-08	2227.84
7	2007-02-15	1188.92
8	2007-04-28	2622.73
9	2007-03-17	2442.16
10	2007-03-20	2669.89
11	2007-03-23	2342.43
12	2007-03-21	2868.27