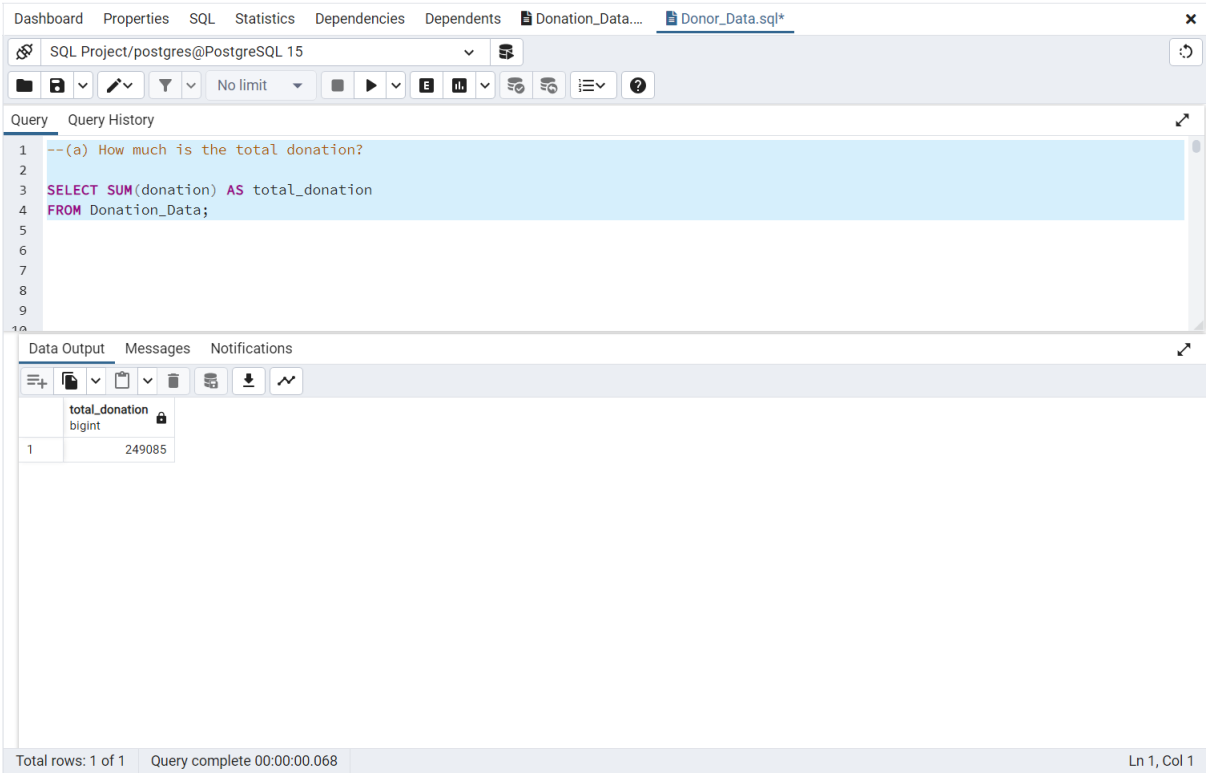
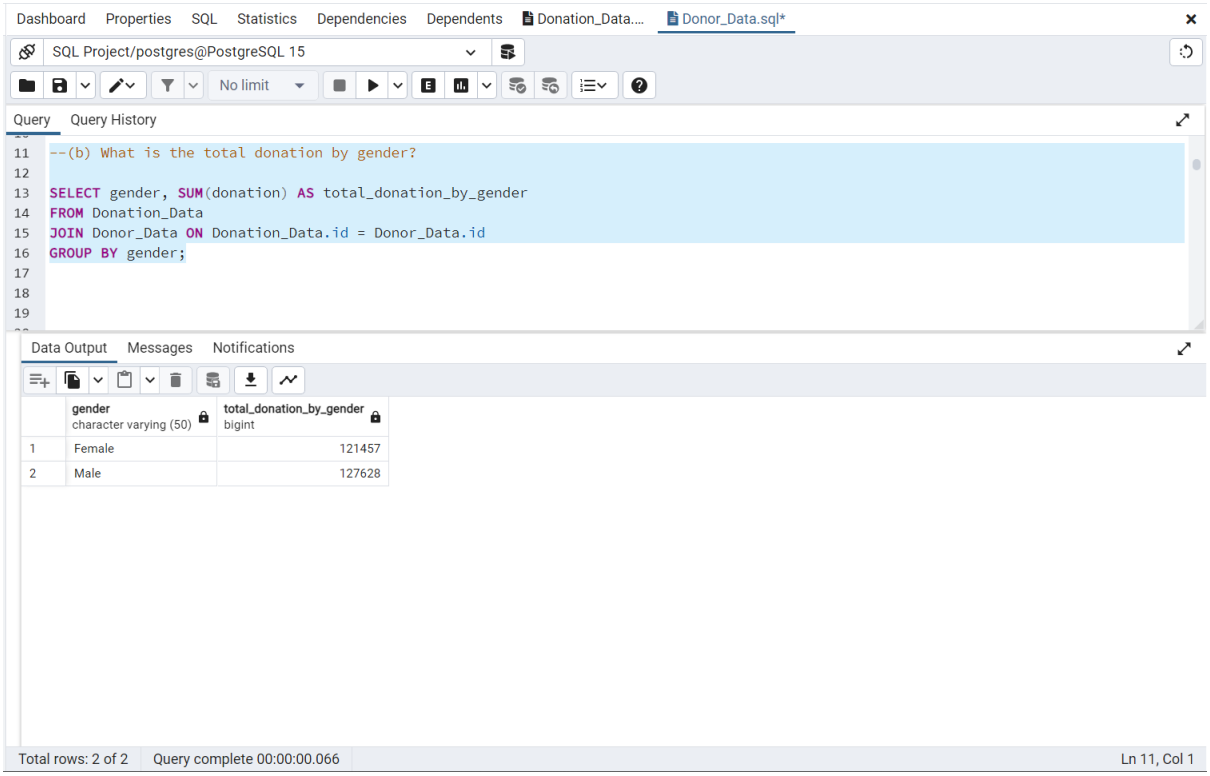
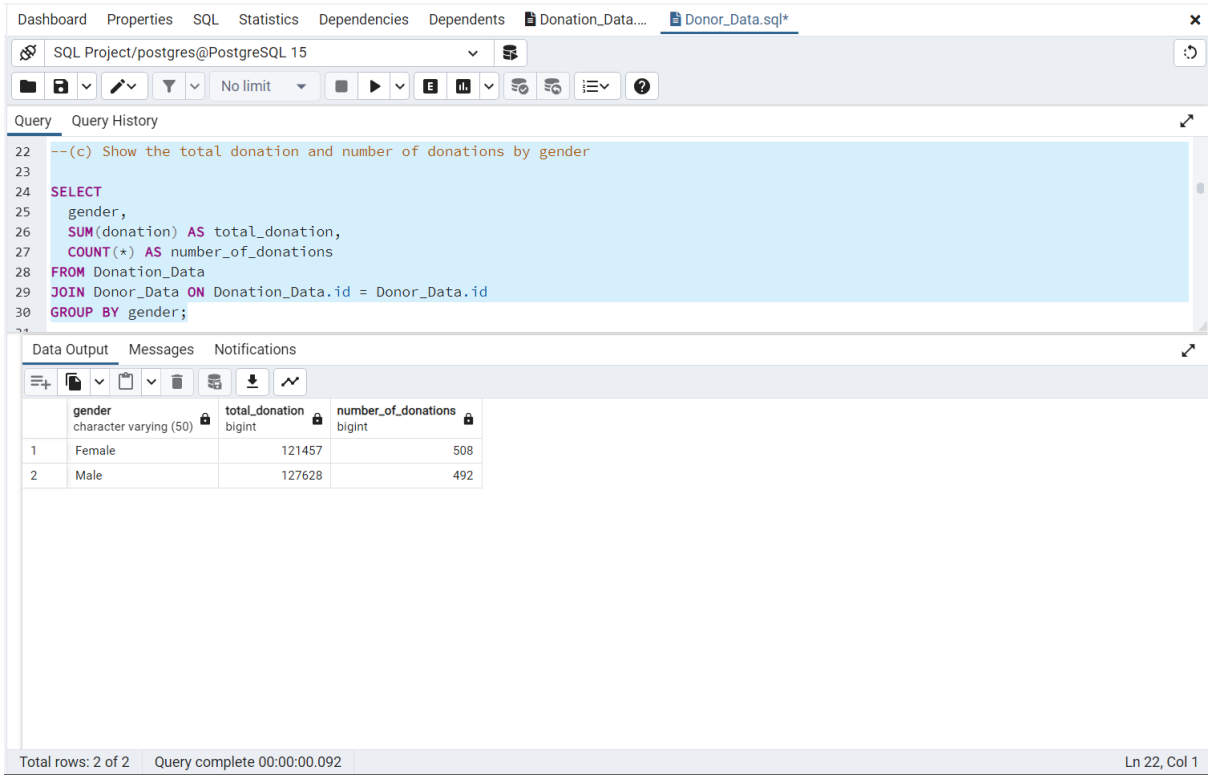

# SQL CAPSTONE PROJECT

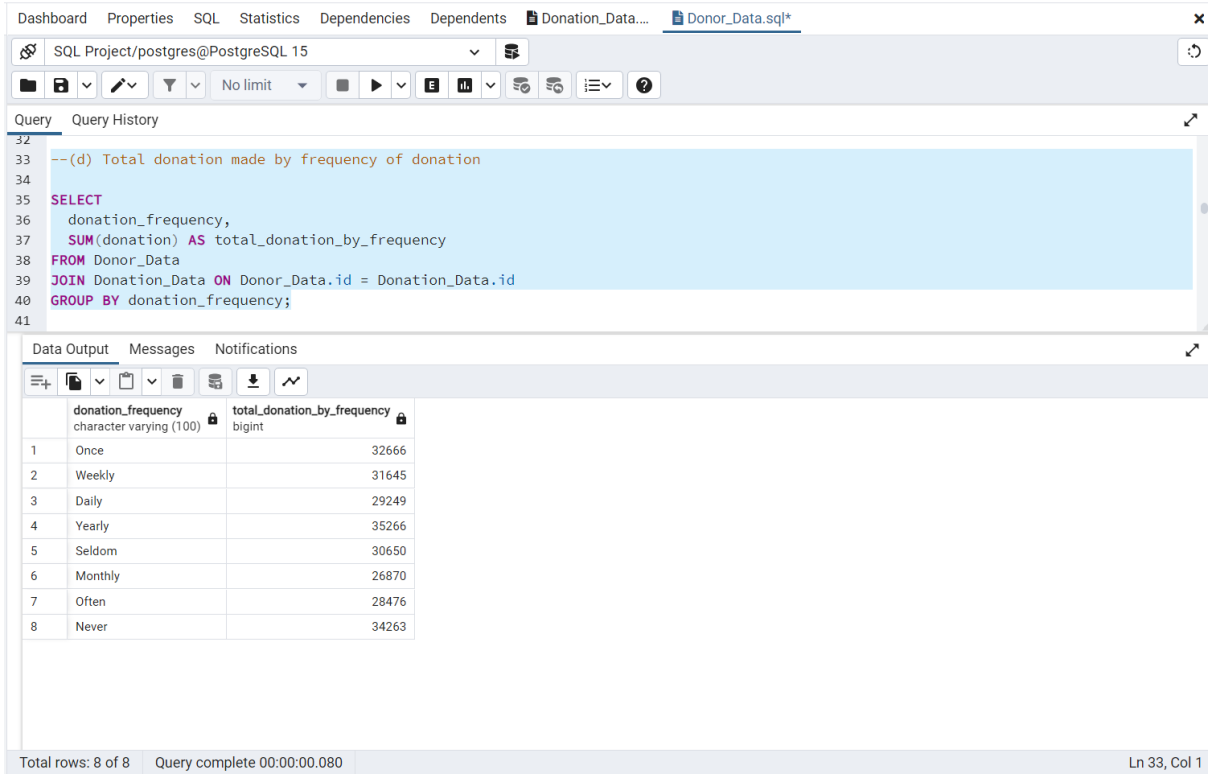
**SUBMITTED BY**

**Ezenwere Chigozie Augustine**


Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
--(a) How much is the total donation?
SELECT SUM(donation) AS total_donation
FROM Donation_Data;
Data Output Messages Notifications
total_donation
bigint
1 249085
Total rows: 1 of 1 Query complete 00:00:00.068 Ln 1, Col 1


Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
--(b) What is the total donation by gender?
SELECT gender, SUM(donation) AS total_donation_by_gender
FROM Donation_Data
JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
GROUP BY gender;
Data Output Messages Notifications
gender
character varying (50)
total_donation_by_gender
bigint
1 Female 121457
2 Male 127628
Total rows: 2 of 2 Query complete 00:00:00.066 Ln 11, Col 1


Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
--(c) Show the total donation and number of donations by gender
SELECT
gender,
SUM(donation) AS total_donation,
COUNT(*) AS number_of_donations
FROM Donation_Data
JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
GROUP BY gender;
Data Output Messages Notifications
gender character varying (50)
total_donation bigint
number_of_donations bigint
1 Female 121457 508
2 Male 127628 492
Total rows: 2 of 2
Query complete 00:00:00.092
Ln 22, Col 1


Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
--(d) Total donation made by frequency of donation
SELECT
donation_frequency,
SUM(donation) AS total_donation_by_frequency
FROM Donor_Data
JOIN Donation_Data ON Donor_Data.id = Donation_Data.id
GROUP BY donation_frequency;
Data Output Messages Notifications
donation_frequency character varying (100)
total_donation_by_frequency bigint
1 Once 32666
2 Weekly 31645
3 Daily 29249
4 Yearly 35266
5 Seldom 30650
6 Monthly 26870
7 Often 28476
8 Never 34263
Total rows: 8 of 8
Query complete 00:00:00.080
Ln 33, Col 1

Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*

SQL Project/postgres@PostgreSQL 15

No limit

Query Query History

```
41
42  --(e) Total donation and number of donation by Job field
43  SELECT
44    job_field,
45    SUM(donation) AS total_donation,
46    COUNT(*) AS number_of_donations
47  FROM Donation_Data
48  JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
49  GROUP BY job_field;
50
```

Data Output Messages Notifications

| | job_field character varying (50) | total_donation bigint | number_of_donations bigint |
|---|---|---|---|
| 1 | Marketing | 18255 | 74 |
| 2 | Training | 21721 | 84 |
| 3 | Product Management | 22798 | 90 |
| 4 | Research and Development | 22862 | 84 |
| 5 | Business Development | 22266 | 94 |
| 6 | Sales | 19009 | 83 |
| 7 | Support | 19475 | 79 |
| 8 | Legal | 17309 | 66 |
| 9 | Accounting | 20504 | 80 |
| 10 | Services | 19858 | 80 |
| 11 | Human Resources | 23060 | 93 |
| 12 | Engineering | 21968 | 93 |

Total rows: 12 of 12 Query complete 00:00:00.080 Ln 42, Col 1

Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*

SQL Project/postgres@PostgreSQL 15

No limit

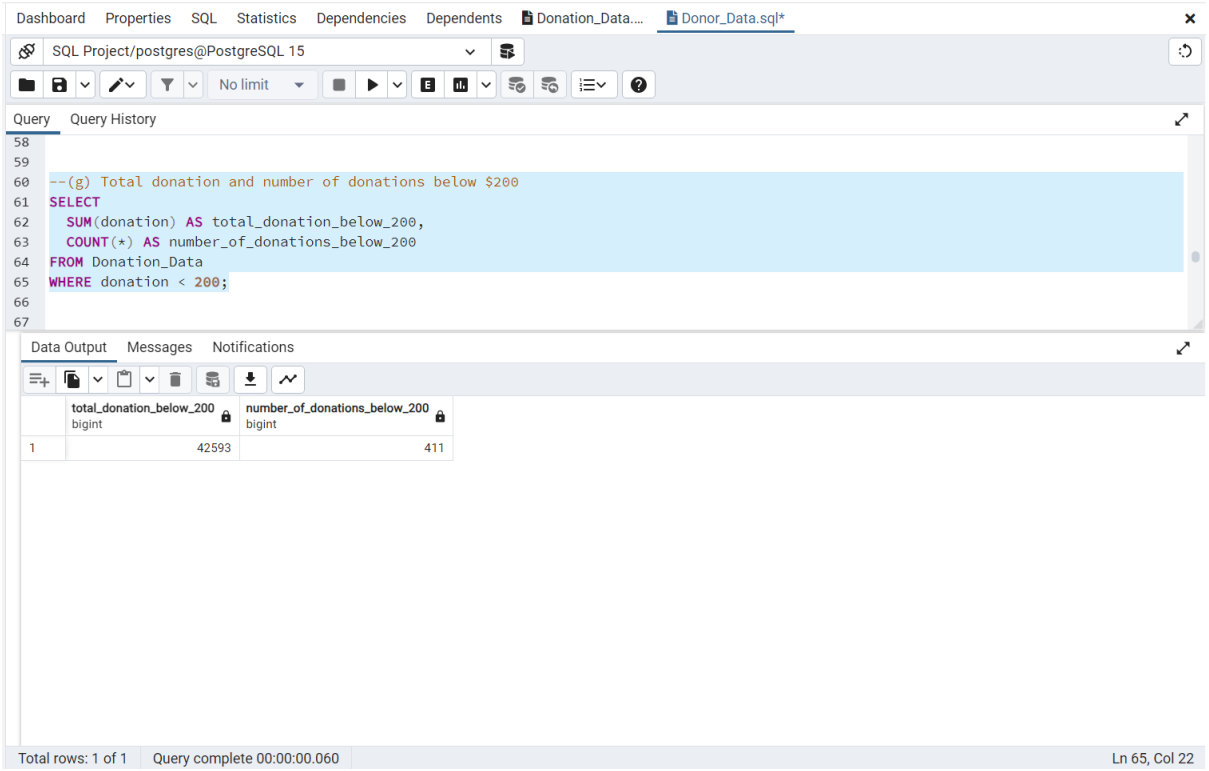
Query Query History

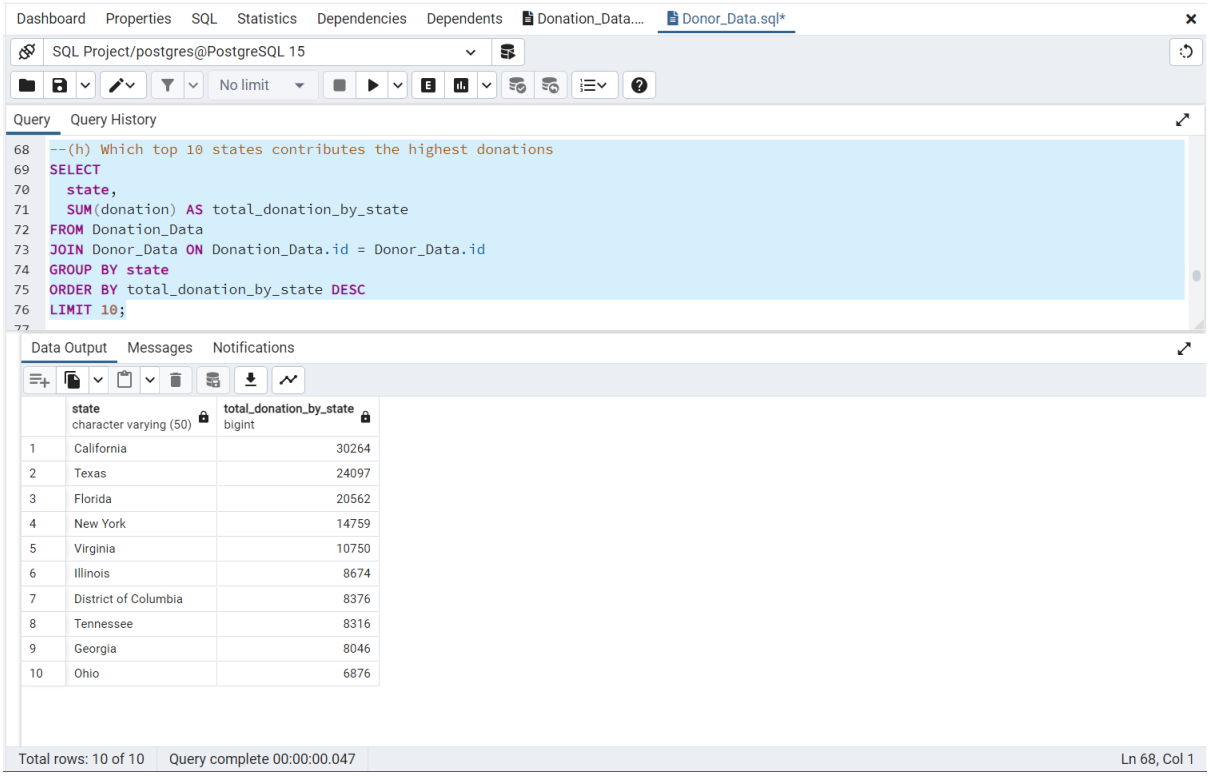
```
50
51  --(f) Total donation and number of donations above $200
52  SELECT
53    SUM(donation) AS total_donation_above_200,
54    COUNT(*) AS number_of_donations_above_200
55  FROM Donation_Data
56  WHERE donation > 200;
57
58
59
```

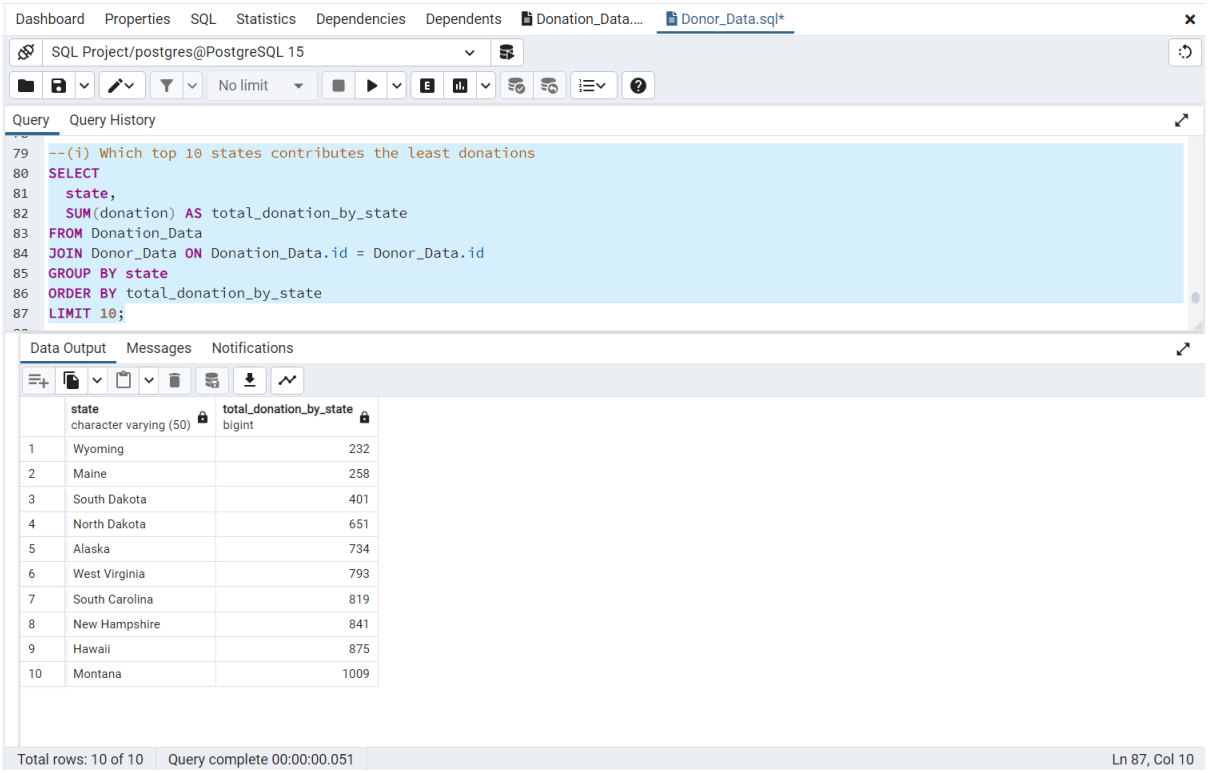
Data Output Messages Notifications

| | total_donation_above_200 bigint | number_of_donations_above_200 bigint |
|---|---|---|
| 1 | 205892 | 586 |

Total rows: 1 of 1 Query complete 00:00:00.127 Ln 51, Col 1

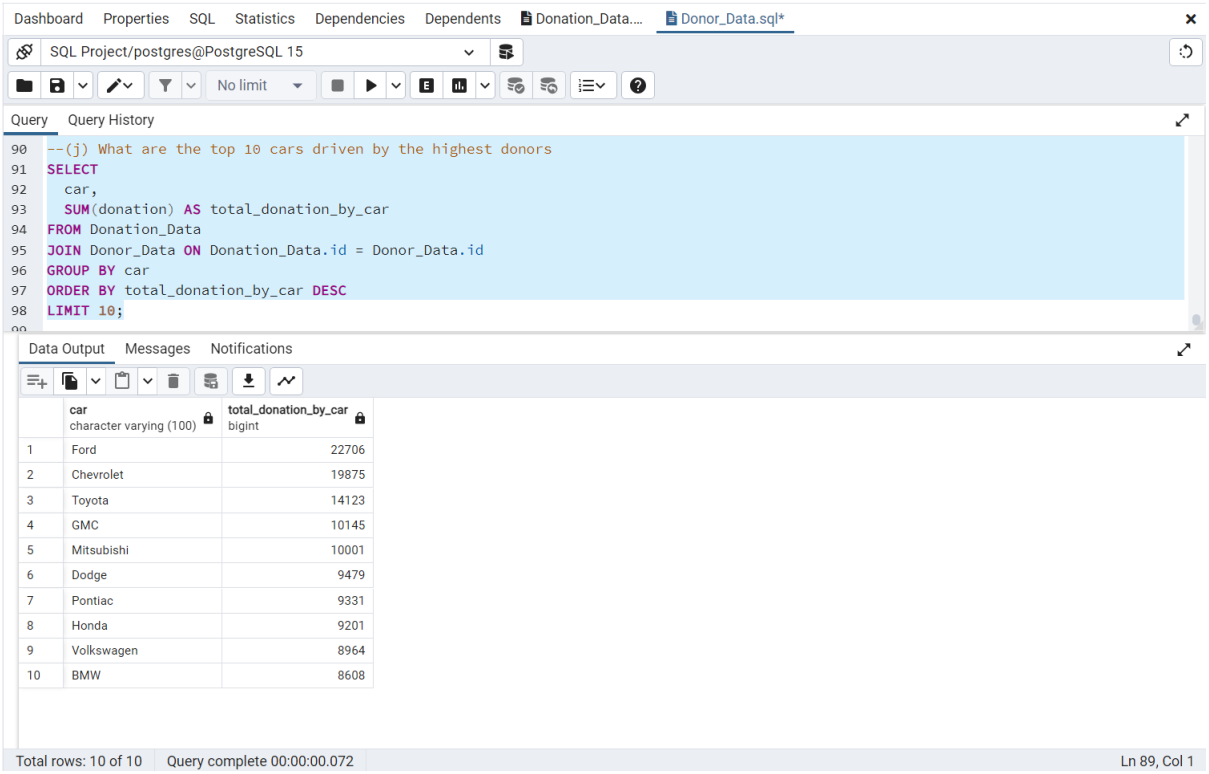

Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
58
59
60 --(g) Total donation and number of donations below $200
61 SELECT
62 SUM(donation) AS total_donation_below_200,
63 COUNT(*) AS number_of_donations_below_200
64 FROM Donation_Data
65 WHERE donation < 200;
66
67
Data Output Messages Notifications
total_donation_below_200 bigint
number_of_donations_below_200 bigint
1 42593 411
Total rows: 1 of 1 Query complete 00:00:00.060 Ln 65, Col 22


Dashboard Properties SQL Statistics Dependencies Dependents Donation_Data.... Donor_Data.sql*
SQL Project/postgres@PostgreSQL 15
No limit
Query Query History
68 --(h) Which top 10 states contributes the highest donations
69 SELECT
70 state,
71 SUM(donation) AS total_donation_by_state
72 FROM Donation_Data
73 JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
74 GROUP BY state
75 ORDER BY total_donation_by_state DESC
76 LIMIT 10;
Data Output Messages Notifications
state character varying (50)
total_donation_by_state bigint
1 California 30264
2 Texas 24097
3 Florida 20562
4 New York 14759
5 Virginia 10750
6 Illinois 8674
7 District of Columbia 8376
8 Tennessee 8316
9 Georgia 8046
10 Ohio 6876
Total rows: 10 of 10 Query complete 00:00:00.047 Ln 68, Col 1



```
--(i) Which top 10 states contributes the least donations
SELECT
  state,
  SUM(donation) AS total_donation_by_state
FROM Donation_Data
JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
GROUP BY state
ORDER BY total_donation_by_state
LIMIT 10;
```

| | state character varying (50) | total_donation_by_state bigint |
|---|---|---|
| 1 | Wyoming | 232 |
| 2 | Maine | 258 |
| 3 | South Dakota | 401 |
| 4 | North Dakota | 651 |
| 5 | Alaska | 734 |
| 6 | West Virginia | 793 |
| 7 | South Carolina | 819 |
| 8 | New Hampshire | 841 |
| 9 | Hawaii | 875 |
| 10 | Montana | 1009 |



```
--(j) What are the top 10 cars driven by the highest donors
SELECT
  car,
  SUM(donation) AS total_donation_by_car
FROM Donation_Data
JOIN Donor_Data ON Donation_Data.id = Donor_Data.id
GROUP BY car
ORDER BY total_donation_by_car DESC
LIMIT 10;
```

| | car character varying (100) | total_donation_by_car bigint |
|---|---|---|
| 1 | Ford | 22706 |
| 2 | Chevrolet | 19875 |
| 3 | Toyota | 14123 |
| 4 | GMC | 10145 |
| 5 | Mitsubishi | 10001 |
| 6 | Dodge | 9479 |
| 7 | Pontiac | 9331 |
| 8 | Honda | 9201 |
| 9 | Volkswagen | 8964 |
| 10 | BMW | 8608 |

## RECOMMENDATIONS

**A. To increase the Number of Donors:**

- **Target High-Donation States:** Focus on states that contribute the highest donations (California, Texas, Florida, New York). Run targeted campaigns and outreach activities in these states to attract new donors.
- **Explore Demographic Patterns:** Analyse the demographics of top donors (e.g., by gender, job field, university) and tailor marketing efforts to attract individuals with similar characteristics.
- **Utilize Effective Communication Channels:** Identify communication channels that are effective in acquiring donors. Allocate resources to channels that have historically led to a higher number of donors.

**B. To increase Donation Frequency:**

- **Engage Regularly:** Implement strategies to engage donors more frequently, such as regular updates on the impact of their contributions or exclusive events for donors.
- **Subscription Programs:** Introduce subscription-based donation programs to encourage recurring donations. Clearly communicate the benefits of sustained support for your cause.
- **Personalized Campaigns:** Use donor data to personalize campaigns based on donation frequency. Send targeted messages to encourage more frequent contributions.

**C. To increase the Value of Donations:**

- **Target High-Value Demographics:** Identify demographics associated with higher donation values and focus marketing efforts on attracting donors from these segments.
- **Major Donor Programs:** Implement major donor programs to cultivate relationships with high-net-worth individuals. Provide exclusive benefits and recognition for major donors.
- **Campaigns for Specific Causes: Run** targeted campaigns for specific causes that resonate with donors who typically contribute higher amounts. Clearly communicate the impact of larger donations.
- **Incentivize Larger Donations:** Explore incentive programs or donation matching campaigns to encourage larger contributions. Highlight the impact of larger donations on your organization's goals.
- **Donor Appreciation Events: Host** events to express gratitude and appreciation for high-value donors. Create a sense of belonging and recognition for their significant contributions.