



Education For All

SQL 10ALYTICS PROJECT

The Project Aims

- ❖ Boosting the frequency of donations from supporters
- ❖ Enhancing the monetary value of donations within the database
- ❖ Expanding the donor base in the database

Total sum of
donate on in \$

Query

Query History

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-- how much is the total donation
SELECT
 COALESCE(**SUM**(donation), 0) **AS** TotalDonation
FROM donation_data;

Data Output

Messages

Graph Visualiser

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Notifications

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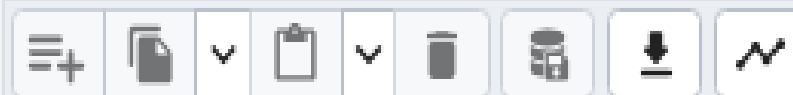
| | totaldonation bigint |
|---|-------------------------|
| 1 | 249085 |

The total donation in \$ and number of donation by gender

Query Query History

```
29
30 -- show the total donation and number of donation by gender
31
32 SELECT gender,
33        COALESCE(SUM(donation),0) AS TotalDonation,
34        COUNT (*) AS NumberofDonations
35 FROM donation_data
36 GROUP BY gender
37
38
39
```

Data Output Messages Notifications



| | gender character varying (50) 🔒 | totaldonation bigint 🔒 | numberofdonations bigint 🔒 |
|---|------------------------------------|---------------------------|-------------------------------|
| 1 | Female | 121457 | 508 |
| 2 | Male | 127628 | 492 |

Total donation in
\$ made by
frequency of
donation



Query Query History

```
39
40 -- Total donation made by frequency of donation
41
42 SELECT
43     d2.donation_frequency,
44     COALESCE(SUM(d1.donation), 0) AS TotalDonation
45 FROM donation_data as d1
46 JOIN donor_data d2
47 ON d1.id = d2.id
48 GROUP BY d2.donation_frequency
49 ;
```

Data Output

Messages

Notifications

| | donation_frequency character varying (100)  | totaldonation 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 donation
and The number
donation in \$ by
Job field

| Query | | Query History | |
|-------------|--|-------------------------|-----------------------------|
| 51 | -- Total donatoin and number donation by job field | | |
| 52 | SELECT d1.job_field, | | |
| 53 | COALESCE(SUM(d1.donation), 0) AS TotalDonation, | | |
| 54 | COUNT(*) AS NumberOfDonations | | |
| 55 | FROM donation_data d1 | | |
| 56 | JOIN donor_data d2 ON d1.id = d2.id | | |
| 57 | GROUP BY d1.job_field | | |
| 58 | ORDER BY d1.job_field; | | |
| 59 | | | |
| Data Output | | Messages | Notifications |
| | job_field character varying (50) | totaldonation bigint | numberofdonations bigint |
| 1 | Accounting | 20504 | 80 |
| 2 | Business Development | 22266 | 94 |
| 3 | Engineering | 21968 | 93 |
| 4 | Human Resources | 23060 | 93 |
| 5 | Legal | 17309 | 66 |
| 6 | Marketing | 18255 | 74 |
| 7 | Product Management | 22798 | 90 |
| 8 | Research and Development | 22862 | 84 |
| 9 | Sales | 19009 | 83 |
| 10 | Services | 19858 | 80 |
| 11 | Support | 19475 | 79 |
| 12 | Training | 21721 | 84 |

Total donation
and the number
of donation in \$
greater \$200

Query

Query History

60

-- Total donation and number of donation above \$200

61

62

SELECT

63

COALESCE(SUM(d1.donation), 0) AS TotalDonation,

64

COUNT(*) AS NumberOfDonations

65

FROM donation_data d1

66

JOIN donor_data d2 ON d1.id = d2.id

67

WHERE d1.donation > 200;

68

Data Output

Messages

Notifications

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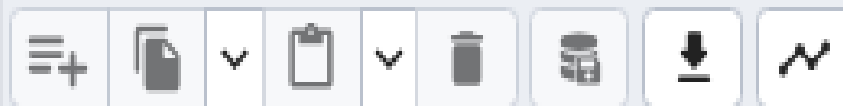
| | totaldonation bigint | numberofdonations bigint |
|---|-------------------------|-----------------------------|
| 1 | 205892 | 586 |

Total donation
and the number
of donation in \$
less than \$200

Query Query History

```
68
69 -- Total donation and number of donation below $200
70 SELECT
71     COALESCE(SUM(d1.donation), 0) AS TotalDonation,
72     COUNT(*) AS NumberOfDonations
73 FROM donation_data d1
74 JOIN donor_data d2 ON d1.id = d2.id
75 WHERE d1.donation < 200;
76
```

Data Output Messages Notifications

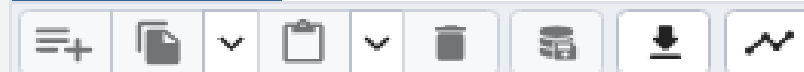


| | totaldonation bigint | numberofdonations bigint |
|---|-------------------------|-----------------------------|
| 1 | 42593 | 411 |

Top 10 state with
the highest total
donation in \$

```
Query  Query History
77  -- which top 10 state contributes the highest donation
78  SELECT d1.state,
79         COALESCE(SUM(d1.donation), 0) AS TotalDonation
80  FROM donation_data d1
81  JOIN donor_data d2 ON d1.id = d2.id
82  GROUP BY d1.state
83  ORDER BY TotalDonation DESC
84  LIMIT 10;
85  |
```

Data Output Messages Notifications



| | state character varying (50) 🔒 | totaldonation 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 |

The Top 10 state that contributed the least donation

```

Query      Query History
86  -- which top 10 state contributes the least donations
87  SELECT d1.state,
88         COALESCE(SUM(d1.donation), 0) AS TotalDonation
89  FROM donation_data d1
90  JOIN donor_data d2 ON d1.id = d2.id
91  GROUP BY d1.state
92  ORDER BY TotalDonation asc
93  LIMIT 10;|
94

```

Data Output

Messages

Notifications

The car brand of the top 10 contributor along with the overall donated amount in \$

Query

Query History

107

108

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115

-- what are the top 10 cars driven by the highest donors
SELECT donor_data.id, car, SUM(donation)
FROM donor_data
JOIN donation_data ON donation_data.id = donor_data.id
GROUP BY donor_data.id, car
ORDER BY SUM(donation) DESC
LIMIT 10;

Data Output

Messages

Graph Visualiser

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Notifications

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| | id integer | car character varying (100) | sum bigint |
|----|---------------|--------------------------------|---------------|
| 1 | 264 | Lexus | 500 |
| 2 | 139 | Ford | 500 |
| 3 | 35 | Buick | 499 |
| 4 | 769 | Mazda | 499 |
| 5 | 480 | MINI | 498 |
| 6 | 965 | Hyundai | 497 |
| 7 | 500 | Dodge | 494 |
| 8 | 76 | Chevrolet | 494 |
| 9 | 969 | GMC | 494 |
| 10 | 565 | Ford | 493 |

Total rows: 10 of 10

Query complete 00:00:00.235

Recommendations

- ❑ The distribution of the total donations in dollars is heavily influenced by the top 5 states (California, Texas, Florida, New York, and Virginia). This skew is primarily attributed to the population concentration in the first 4 states. To address this, I suggest implementing heightened awareness programs and increased advertising efforts in other states, particularly in Illinois, Ohio, Georgia, North Carolina, Michigan, and New Jersey. It's worth noting that Virginia, despite contributing 2.57%, rank 12th in state population distribution, falling below the highlighted states as per information available at <https://www.infoplease.com/us/states/state-population-by-rank>.
- ❑ The outlined strategy also serves the purpose of augmenting the frequency of the donations from contributors in the highlighted states. While it might be contended that Virginia is home to some of the wealthiest individuals in the United State, data from <https://www.edudwar.com/top-10-richest-states-in-usa/> indicates that Virginia holds the 10th position among the richest states in the country.



Thanks You

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