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 $

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

Query | Query History

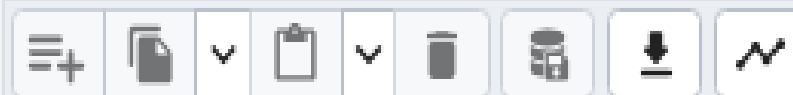Data Output | Messages | Graph Visualiser ✕ | Notifications

	totaldonation 🔒 bigint
1	249085

The total donation in $ and number of donation by gender

```
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

```
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

```sql
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

```sql
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
```

Query | Query History

Data Output | Messages | Notifications

totaldonation bigint	numberofdonations bigint
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
```
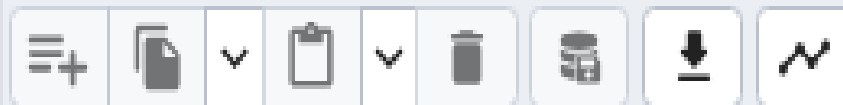
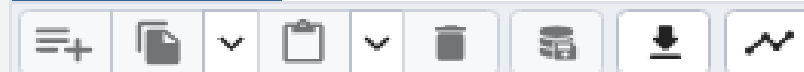Data Output | Messages | Notifications

	totaldonation bigint	numberofdonations bigint
1	42593	411

Top 10 state with the highest total donation in $

```
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  |
```

Query   Query History

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

```sql
-- which top 10 state contributes the least donations
SELECT d1.state,
    COALESCE(SUM(d1.donation), 0) AS TotalDonation
FROM donation_data d1
JOIN donor_data d2 ON d1.id = d2.id
GROUP BY d1.state
ORDER BY TotalDonation asc
LIMIT 10;
```

Query | **Query History**

Data Output | Messages | Notifications

	state character varying (50)	totaldonation 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

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


```
107
108
109   -- what are the top 10 cars driven by the highnest donors
110   SELECT donor_data.id, car, SUM(donation)
111   FROM donor_data
112   JOIN donation_data ON donation_data.id = donor_data.id
113   GROUP BY donor_data. id, car
114   ORDER BY SUM(donation) DESC
115   LIMIT 10;
```

Query   Query History

Data Output   Messages   Graph Visualiser ×   Notifications

	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 nothing 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.