Education for All Case Study

An SQL capstone project work at 10Alytics

Our Objective

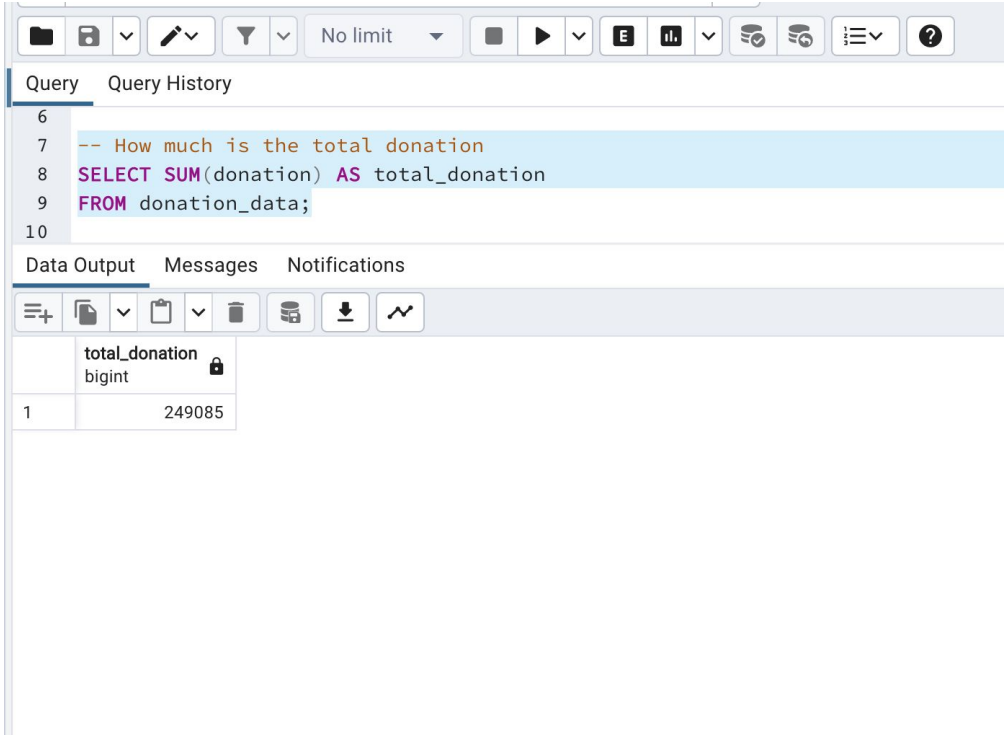
1. Increase the number of donors in our database
2. Increase the frequency of donation by donors
3. Increase the value of donation in our database

Our Approach

After connecting to our database, we were able to run queries to answer a few business question and as a result, recommend solution to meet the business objectives listed in the previous slides

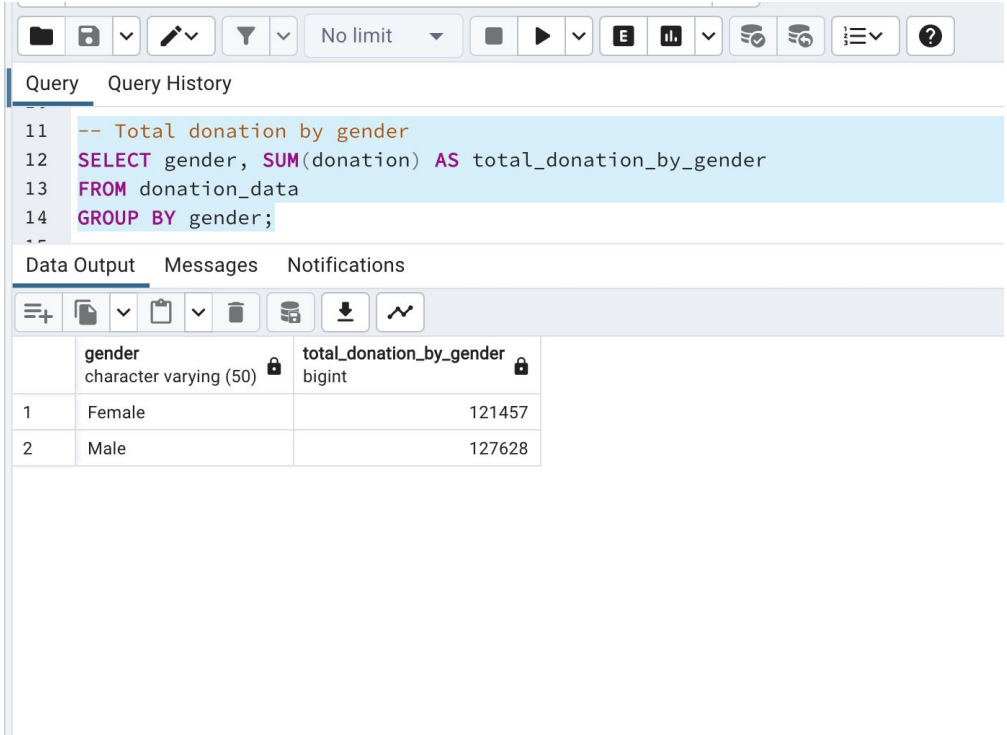
I performed queries including, JOIN, ORDER BY, WHERE, GROUP BY etc to create different tables with information needed to make a good business decision

How much is the total donation?



The total donation in our database is **$249085**

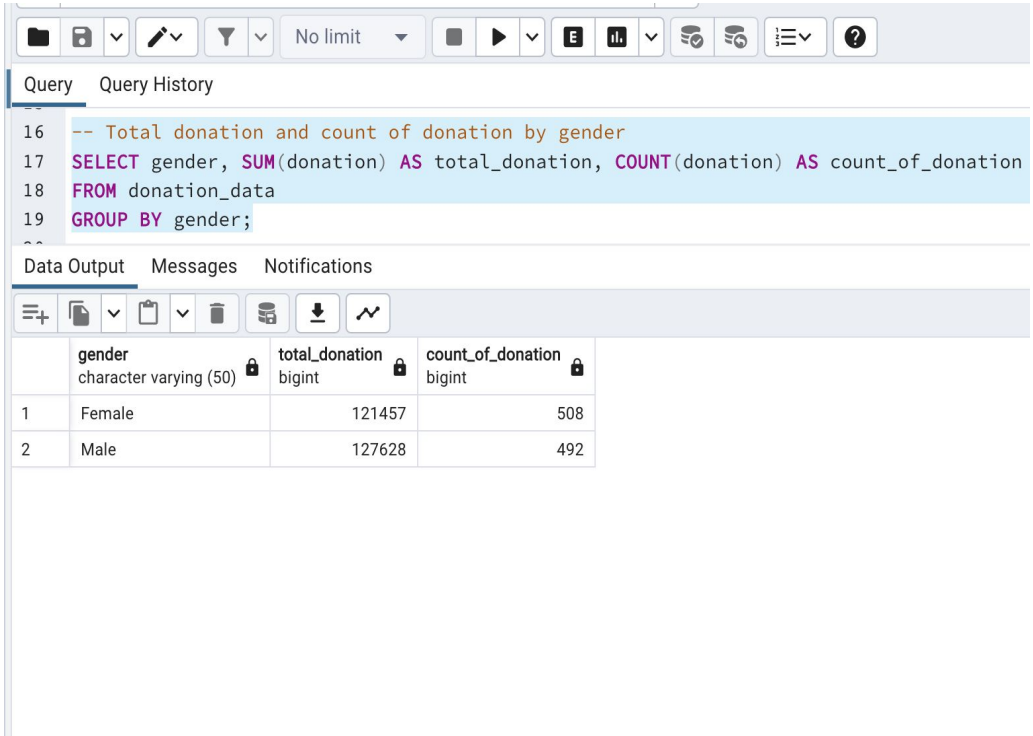
What is the total donation by gender?



The total donation from female donors is **$121,457**

The total donation from male donors is **$127,628**

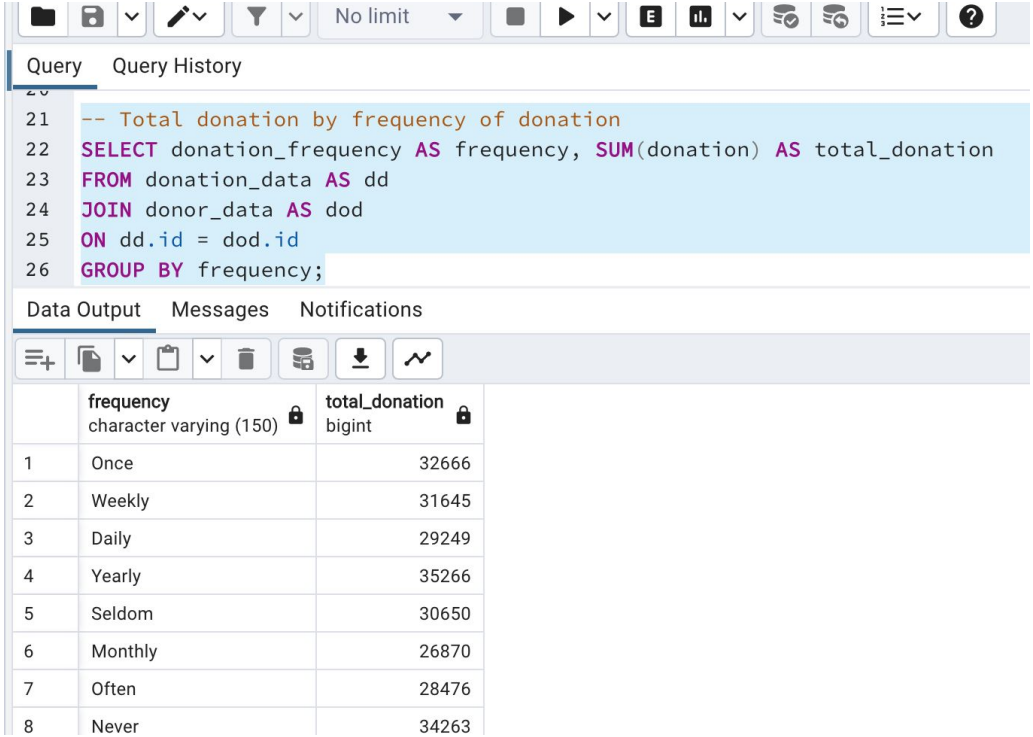
Show the total donation and number of donations by gender



The total donation from female donors is **$121,457** and count of **508**

The total donation from male donors is **$127,628** and count of **492**

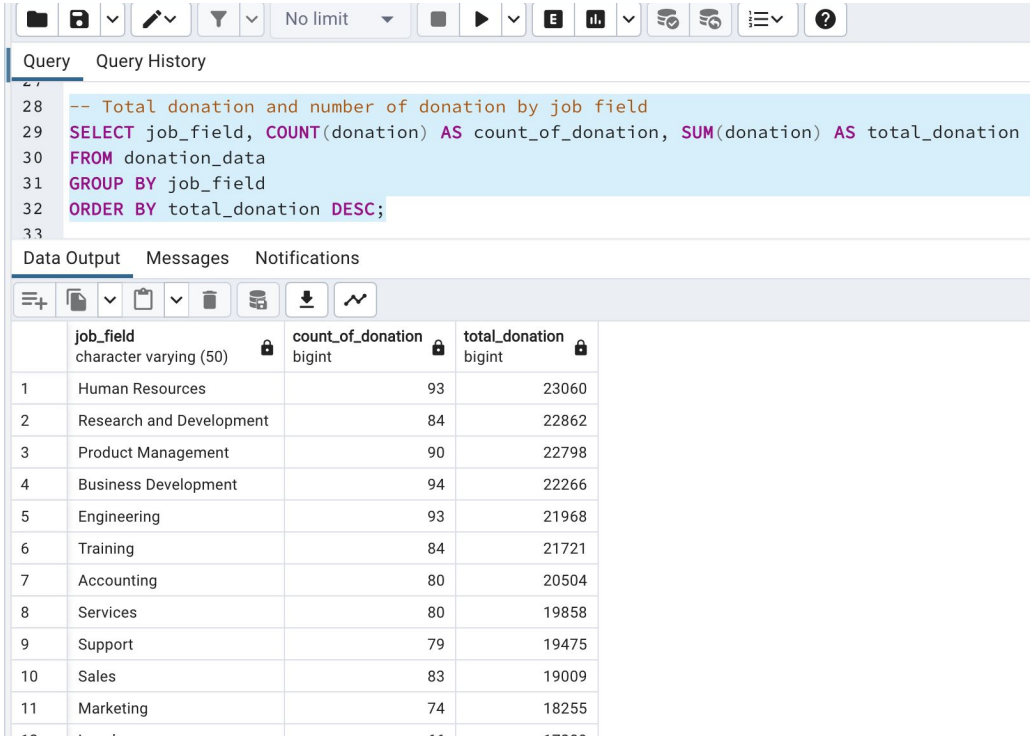
Total donation made by frequency of donation



	frequency character varying (150)	total_donation 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

One time donors either **yearly**, **once** or **never** donate actually do the most as they have the higher figures compared to the monthly, daily and weekly donors.

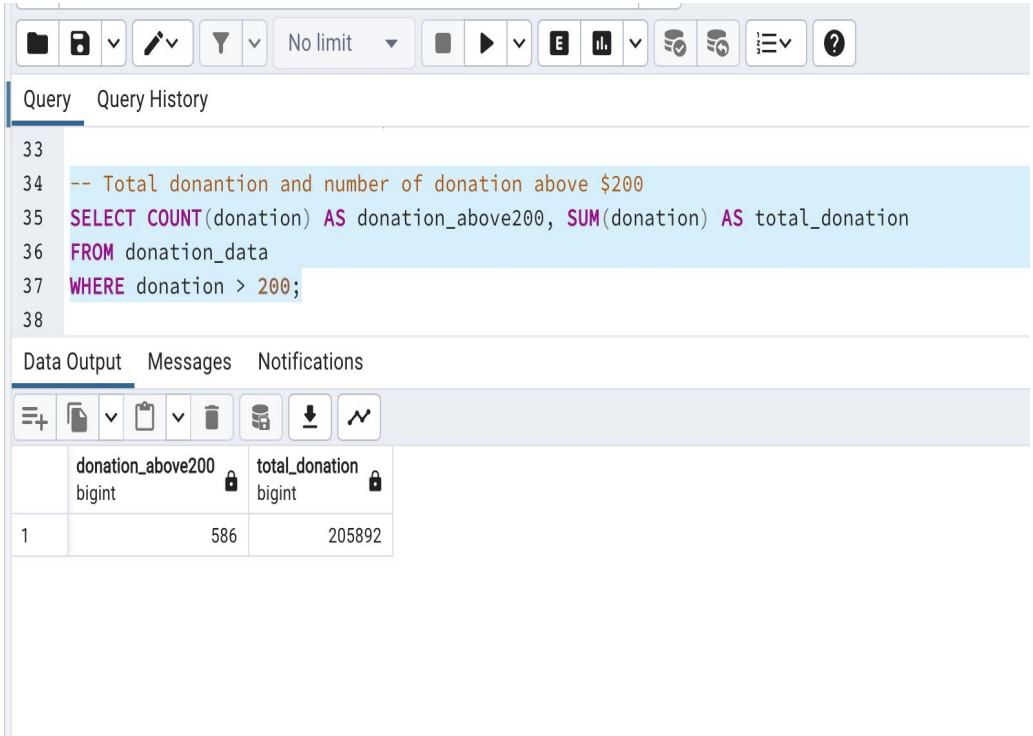
Total donation and number of donation by Job field



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

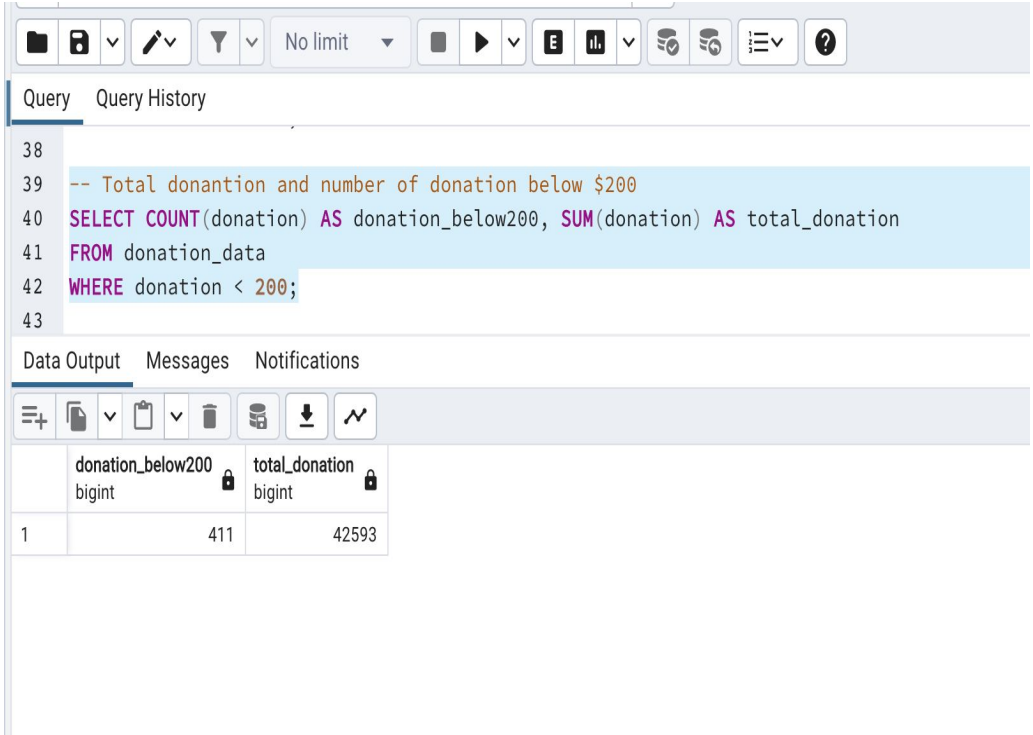
Professionals in **HR, R&D, Product Management and Business Development** are the top donors during the period in review

Total donation and number of donations above $200



The count of donations above **$200** is **586**

Total donation and number of donations below $200



The count of donations below **$200** is **411**

Which top 10 states contributes the highest donations

```sql
-- Top 10 states with the highest donation
SELECT state, SUM(donation) AS total_donation
FROM donation_data
GROUP BY state
ORDER BY total_donation DESC
LIMIT 10;
```

Data Output | Messages | Notifications

	state character varying (50)	total_donation 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 highest donation came in from **California, Texas** and **Florida** followed by **New York** and **Virginia**

Which top 10 states contributes the least donations

Query Query History

```
51  -- Top 10 states with the least donation
52  SELECT state, SUM(donation) AS total_donation
53  FROM donation_data
54  GROUP BY state
55  ORDER BY total_donation ASC
56  LIMIT 10;
```

Data Output Messages Notifications

	state character varying (50)	total_donation 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 least donations came in from **Wyoming, Maine** and **Dakota States**

What are the top 10 cars driven by the highest donors

Query | Query History

```sql
-- Top 10 cars driven by the highest donors
SELECT car, SUM(donation) AS total_donation
FROM donation_data AS dd
JOIN donor_data AS dod
ON dd.id = dod.id
GROUP BY car
ORDER BY total_donation DESC
LIMIT 10;
```

Data Output | Messages | Notifications

	car character varying (150)	total_donation 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

Top on the list of cars used by donors is **Ford, Chevrolet, Toyota** and **GMC**

Insights and Recommendation

My analysis shows that more than 70% of the total donation were made by people who donated above $200. Most of which were yearly donors, one time donors and never donated before. There are mostly from California, Texas and also HR & Research and Development professionals.

To increase the donations and donors, I would recommend that Education for All initiates an annual donation event in the above locations and call on professionals in the listed occupations types (They probably have first-hand knowledge of the impact of quality education) to give just once and hopefully a lump sum of above $200 would be donation to cover the whole year

THANK YOU