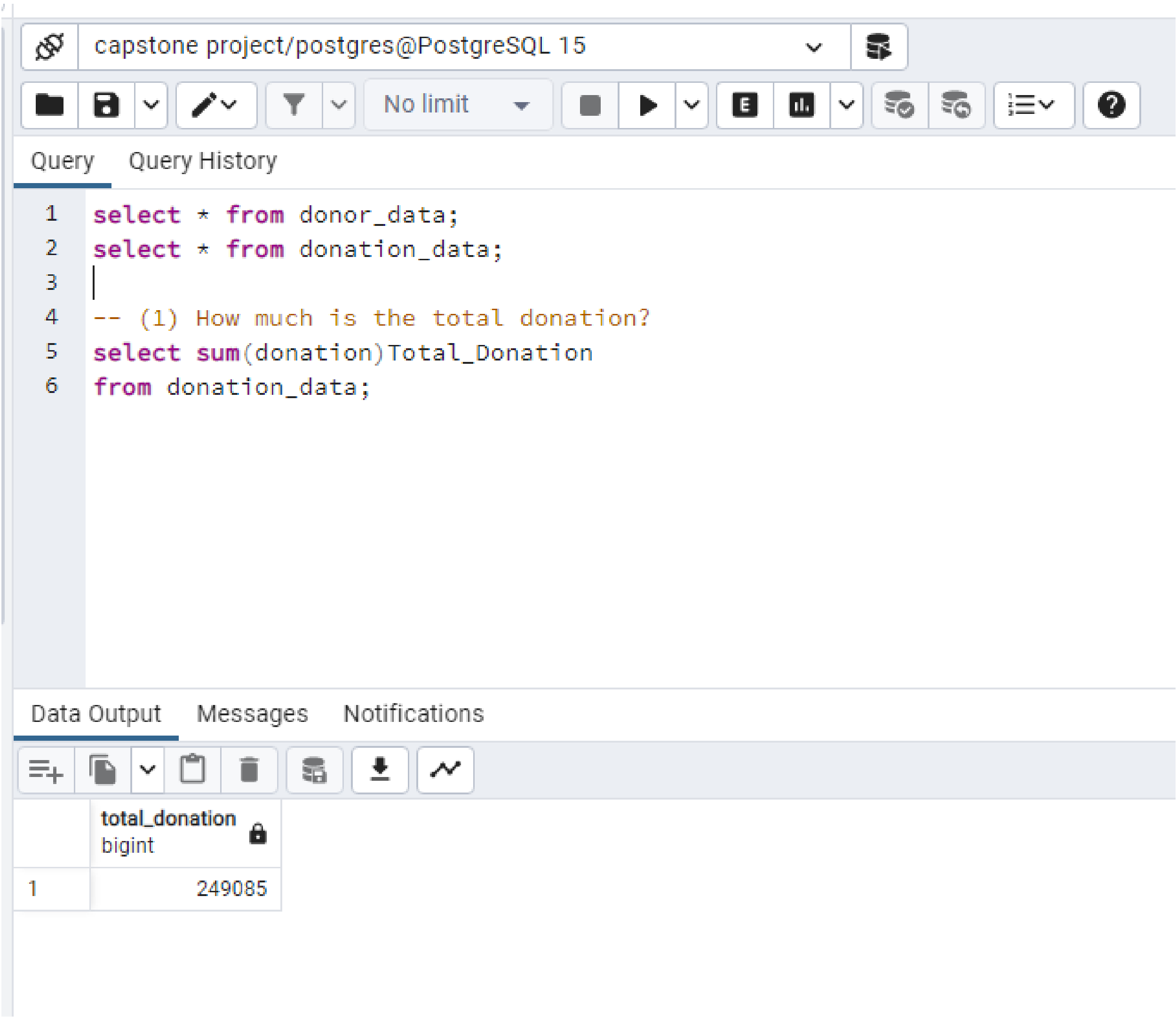
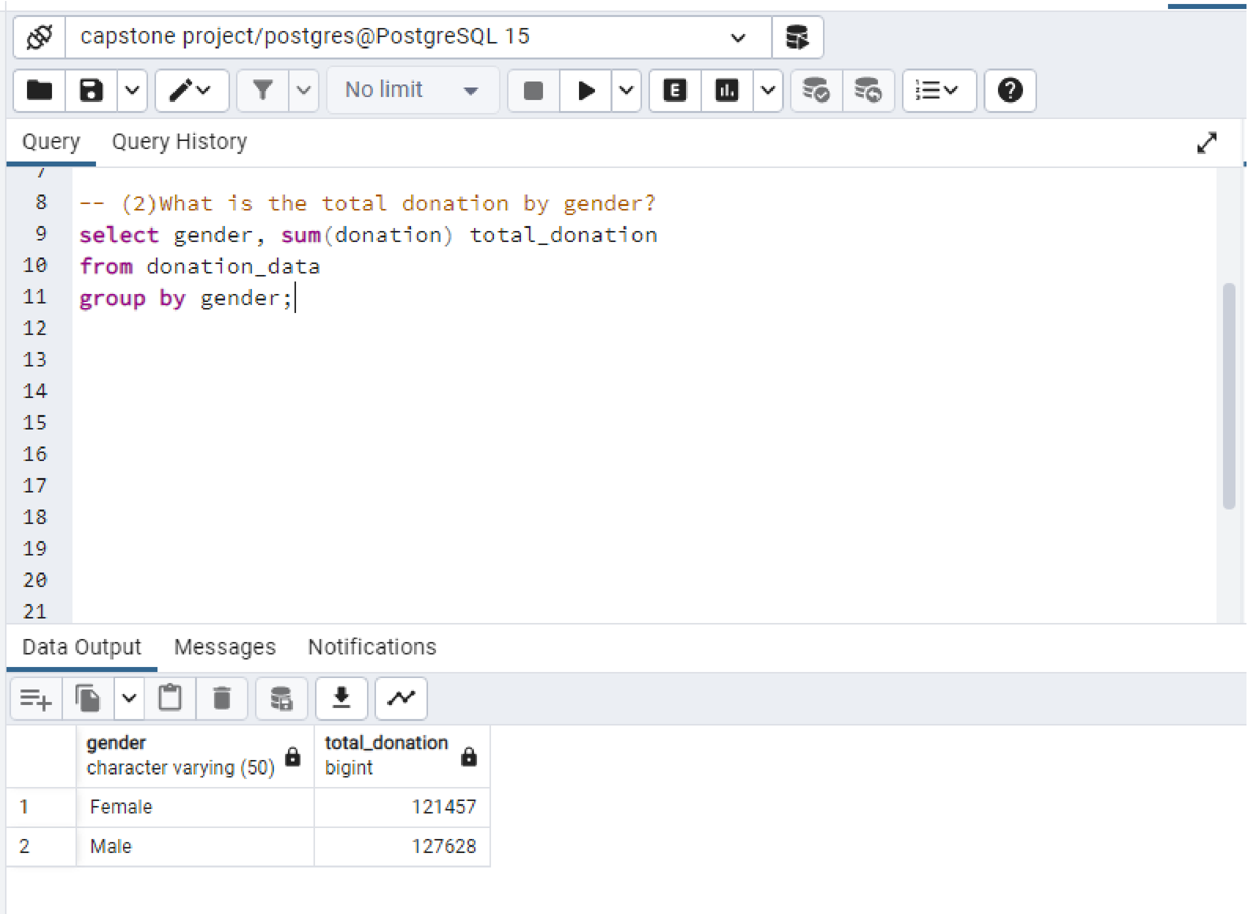


```sql
select * from donor_data;
select * from donation_data;

-- (1) How much is the total donation?
select sum(donation)Total_Donation
from donation_data;
```

	total_donation bigint
1	249085

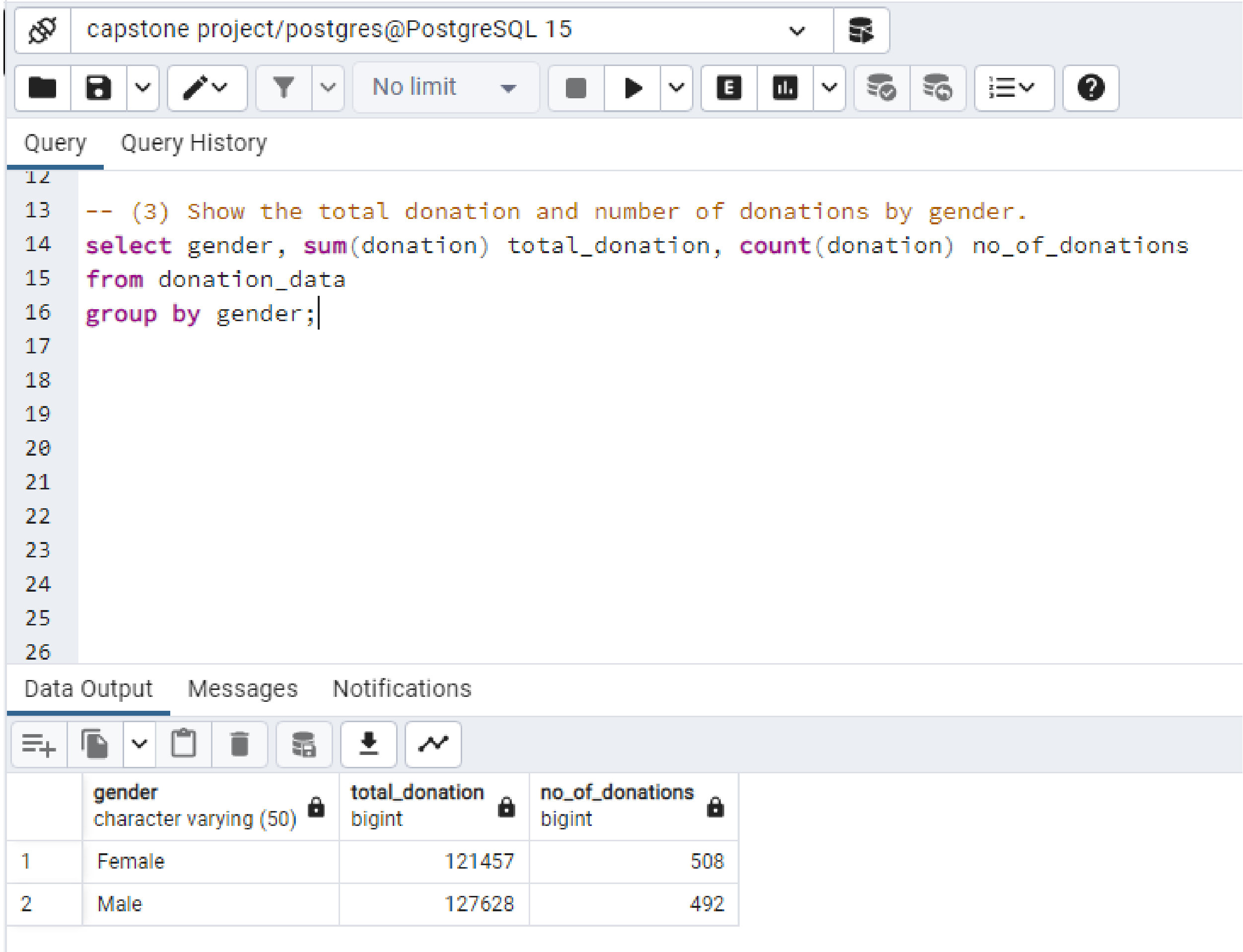
Q2:



```
-- (2)What is the total donation by gender?
select gender, sum(donation) total_donation
from donation_data
group by gender;
```

	gender character varying (50)	total_donation bigint
1	Female	121457
2	Male	127628

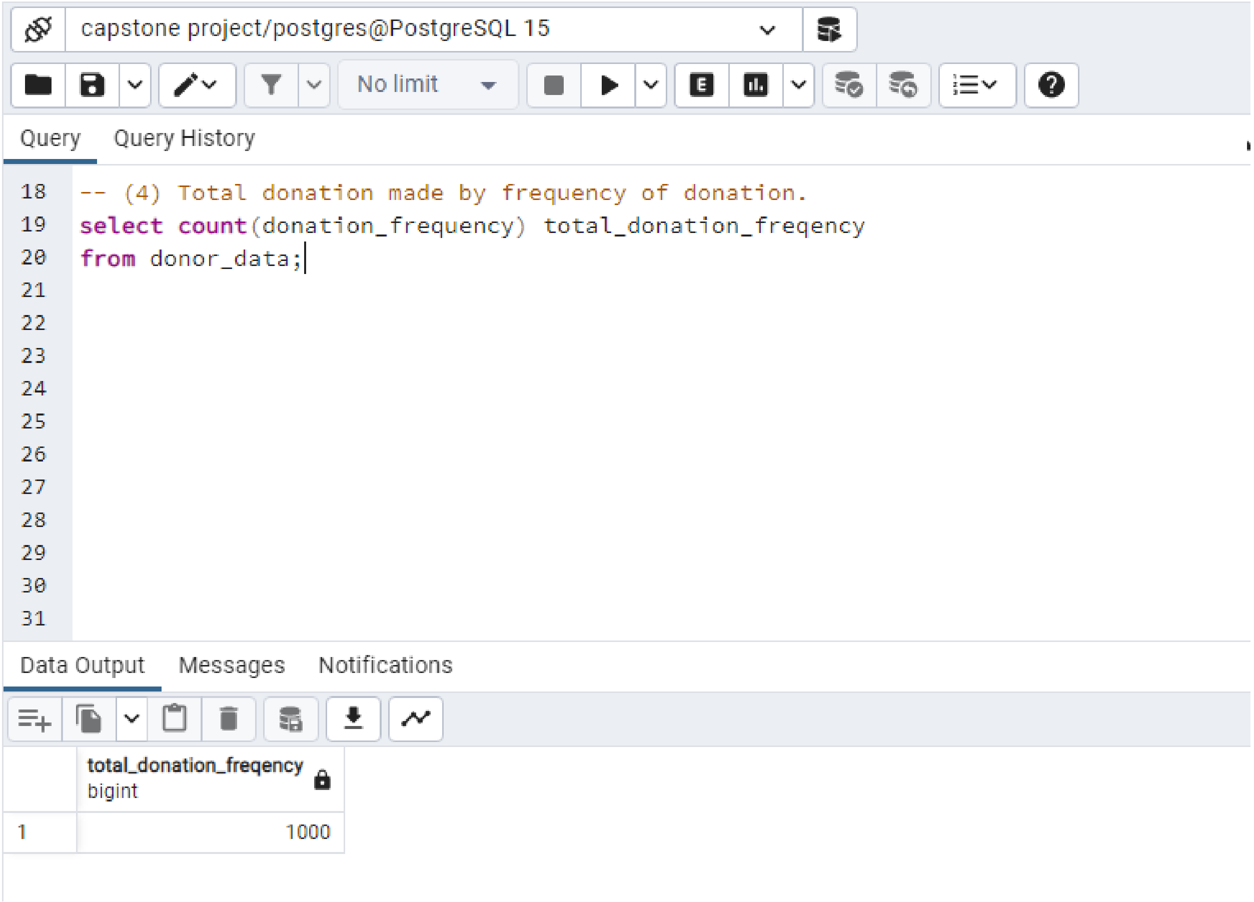
Q3



```sql
-- (3) Show the total donation and number of donations by gender.
select gender, sum(donation) total_donation, count(donation) no_of_donations
from donation_data
group by gender;
```

	gender character varying (50)	total_donation bigint	no_of_donations bigint
1	Female	121457	508
2	Male	127628	492

Q4.



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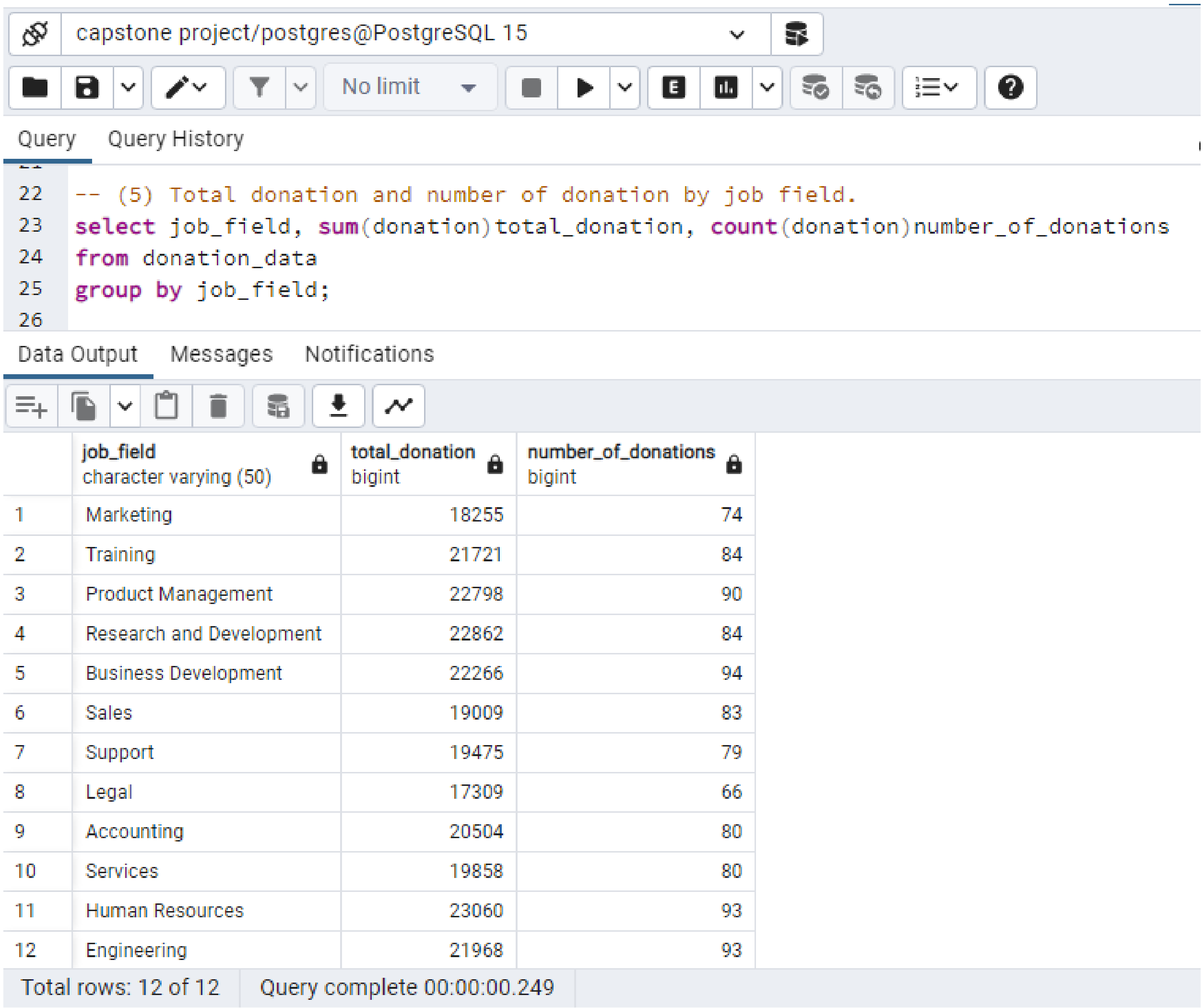
No limit

```
-- (4) Total donation made by frequency of donation.
select count(donation_frequency) total_donation_freqency
from donor_data;
```

```
   total_donation_freqency
   bigint
1                     1000
```

Q5

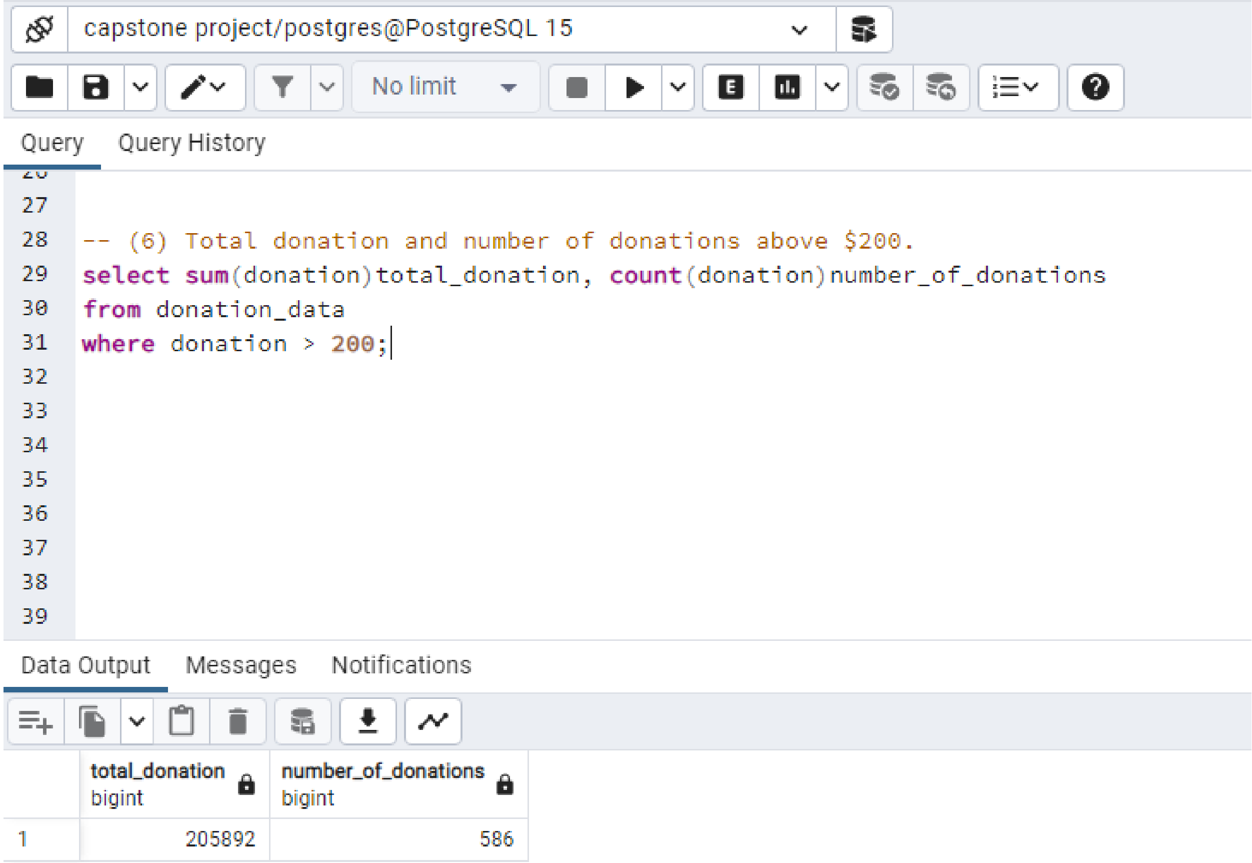


```sql
-- (5) Total donation and number of donation by job field.
select job_field, sum(donation)total_donation, count(donation)number_of_donations
from donation_data
group by job_field;
```

	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 00:00:00.249

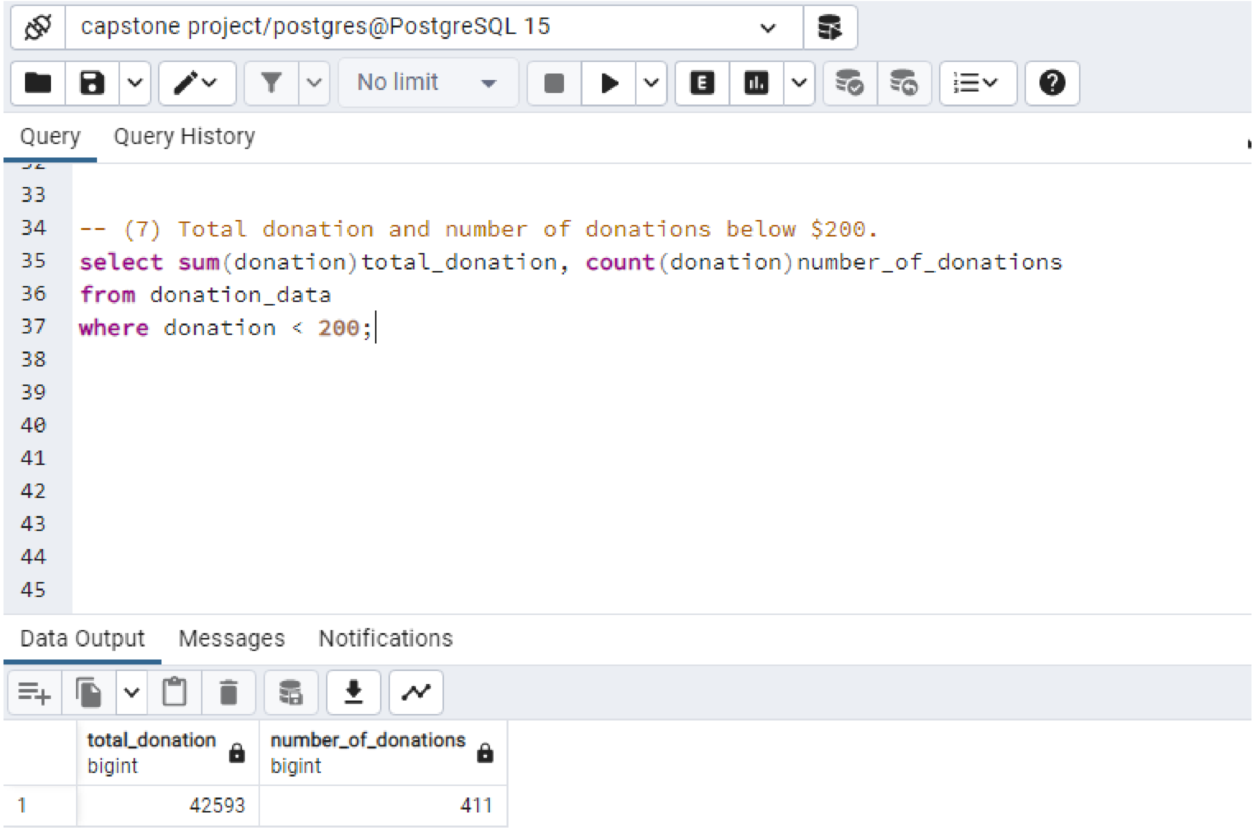
Q6.



```sql
-- (6) Total donation and number of donations above $200.
select sum(donation)total_donation, count(donation)number_of_donations
from donation_data
where donation > 200;
```

	total_donation bigint	number_of_donations bigint
1	205892	586

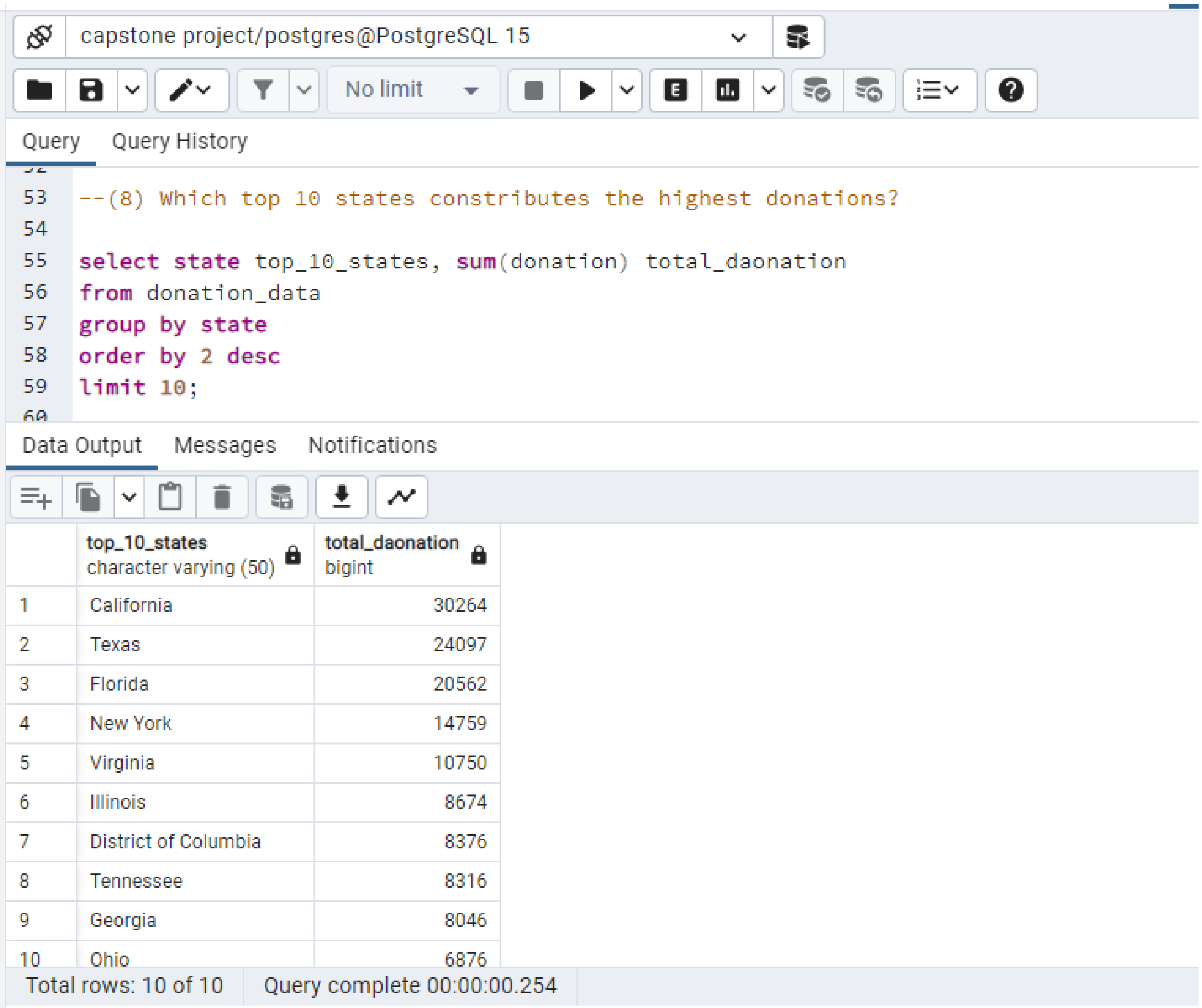
Q7



```sql
-- (7) Total donation and number of donations below $200.
select sum(donation)total_donation, count(donation)number_of_donations
from donation_data
where donation < 200;
```

	total_donation bigint	number_of_donations bigint
1	42593	411

Q8.



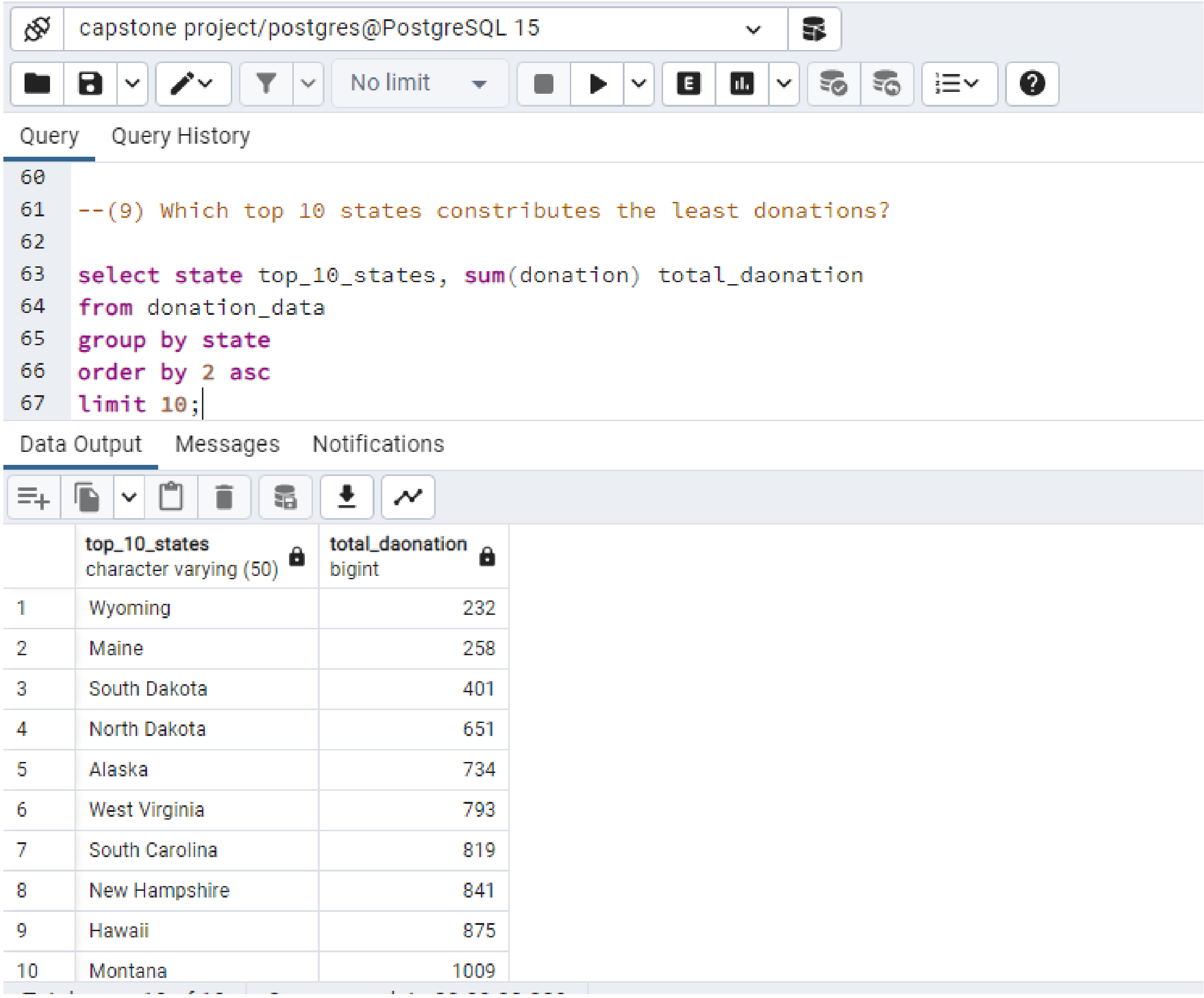
```
--(8) Which top 10 states constributes the highest donations?

select state top_10_states, sum(donation) total_daonation
from donation_data
group by state
order by 2 desc
limit 10;
```

	top_10_states character varying (50)	total_daonation 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 00:00:00.254

Q9.



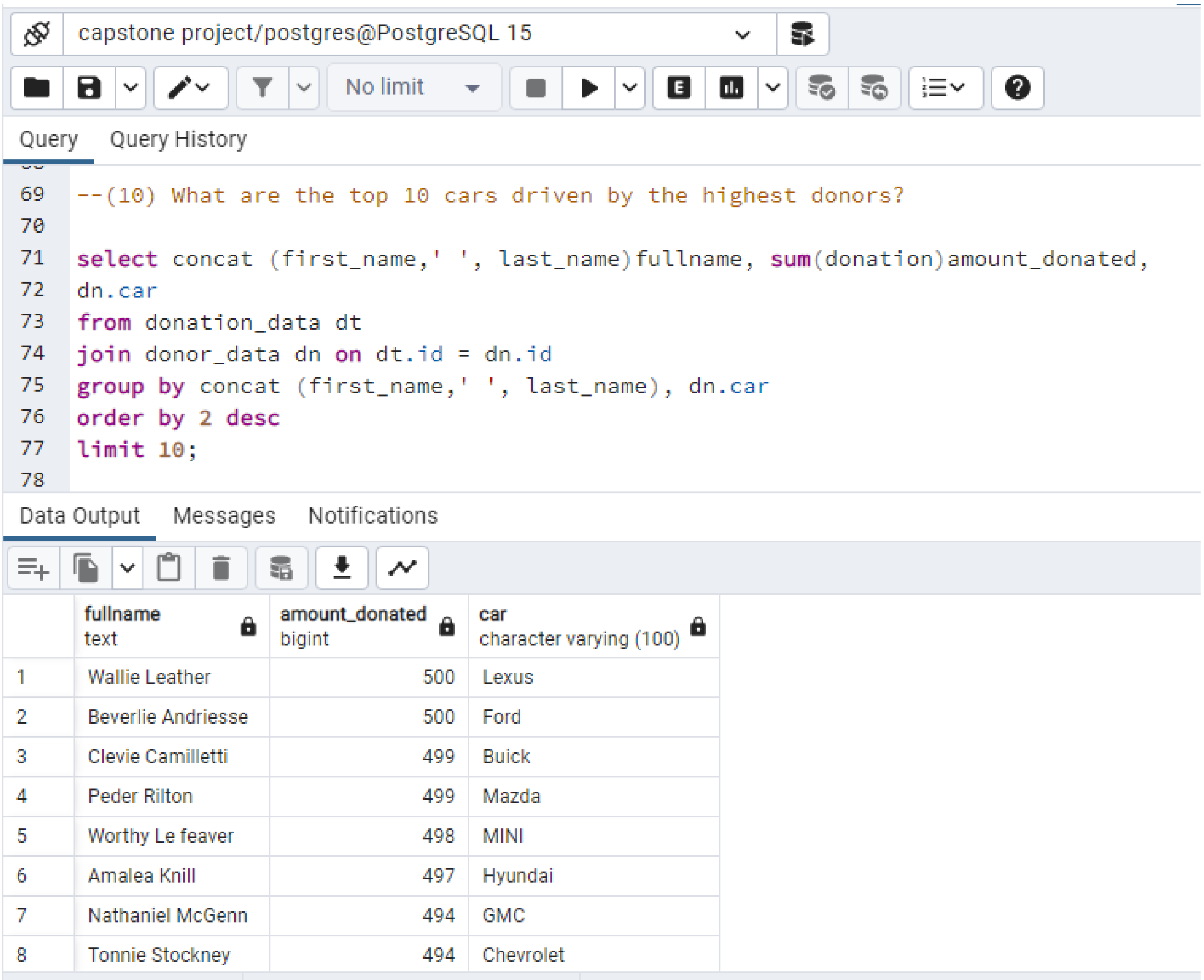
```sql

--(9) Which top 10 states constributes the least donations?

select state top_10_states, sum(donation) total_daonation
from donation_data
group by state
order by 2 asc
limit 10;
```

	top_10_states character varying (50)	total_daonation 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

Q10.



```sql
--(10) What are the top 10 cars driven by the highest donors?

select concat (first_name,' ', last_name)fullname, sum(donation)amount_donated,
dn.car
from donation_data dt
join donor_data dn on dt.id = dn.id
group by concat (first_name,' ', last_name), dn.car
order by 2 desc
limit 10;
```

	fullname text	amount_donated bigint	car character varying (100)
1	Wallie Leather	500	Lexus
2	Beverlie Andriesse	500	Ford
3	Clevie Camilletti	499	Buick
4	Peder Rilton	499	Mazda
5	Worthy Le feaver	498	MINI
6	Amalea Knill	497	Hyundai
7	Nathaniel McGenn	494	GMC
8	Tonnie Stockney	494	Chevrolet

ANLAYSIS AND RECOMMENDATIONS

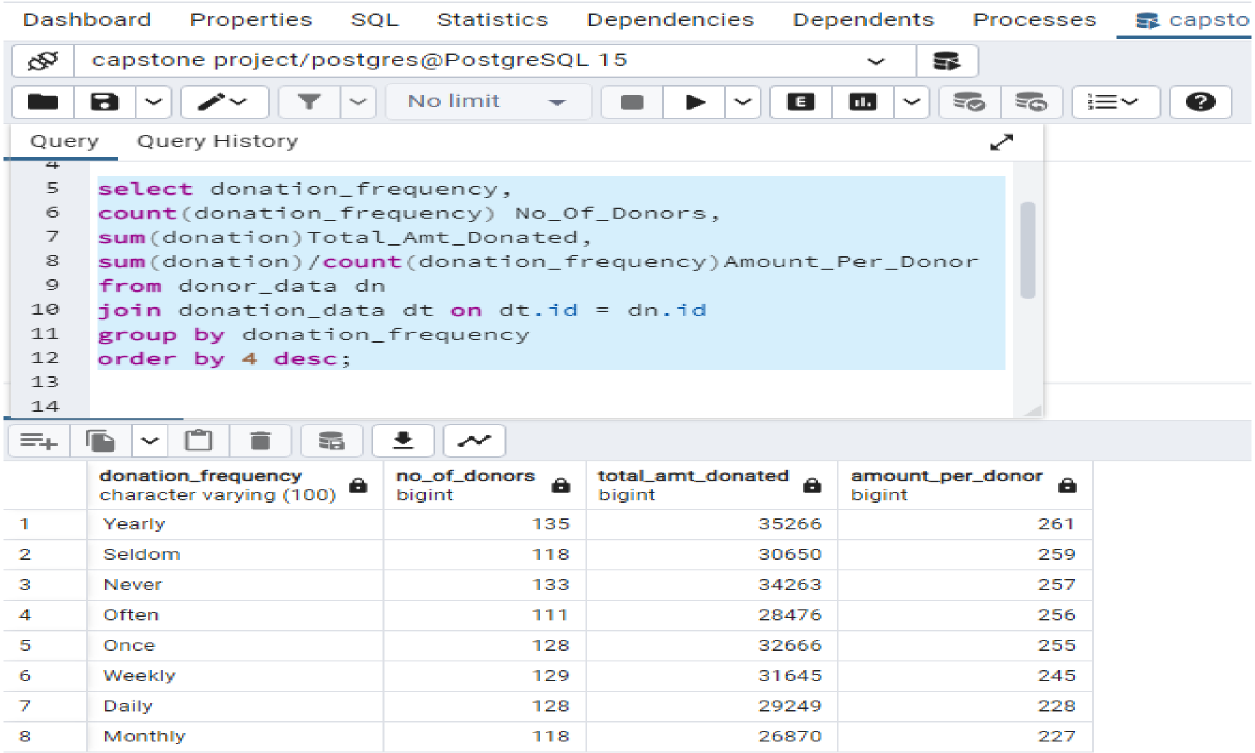
Some information needed to be clarified like "Never" as a frequency of donation variable. The data shows this group actually contribute more individually than other members in the same column. Therefore, the term “never” should not be taken literally.

Quick Analysis 1 (amount donated by frequency of donation)

Based on the screenshot attached, here are my insights:

- Those who donate yearly are the highest contributors to the course, with individual average donation of $261.

- Those who donate monthly are the lowest contributors to the course, with individual average donation of $227.

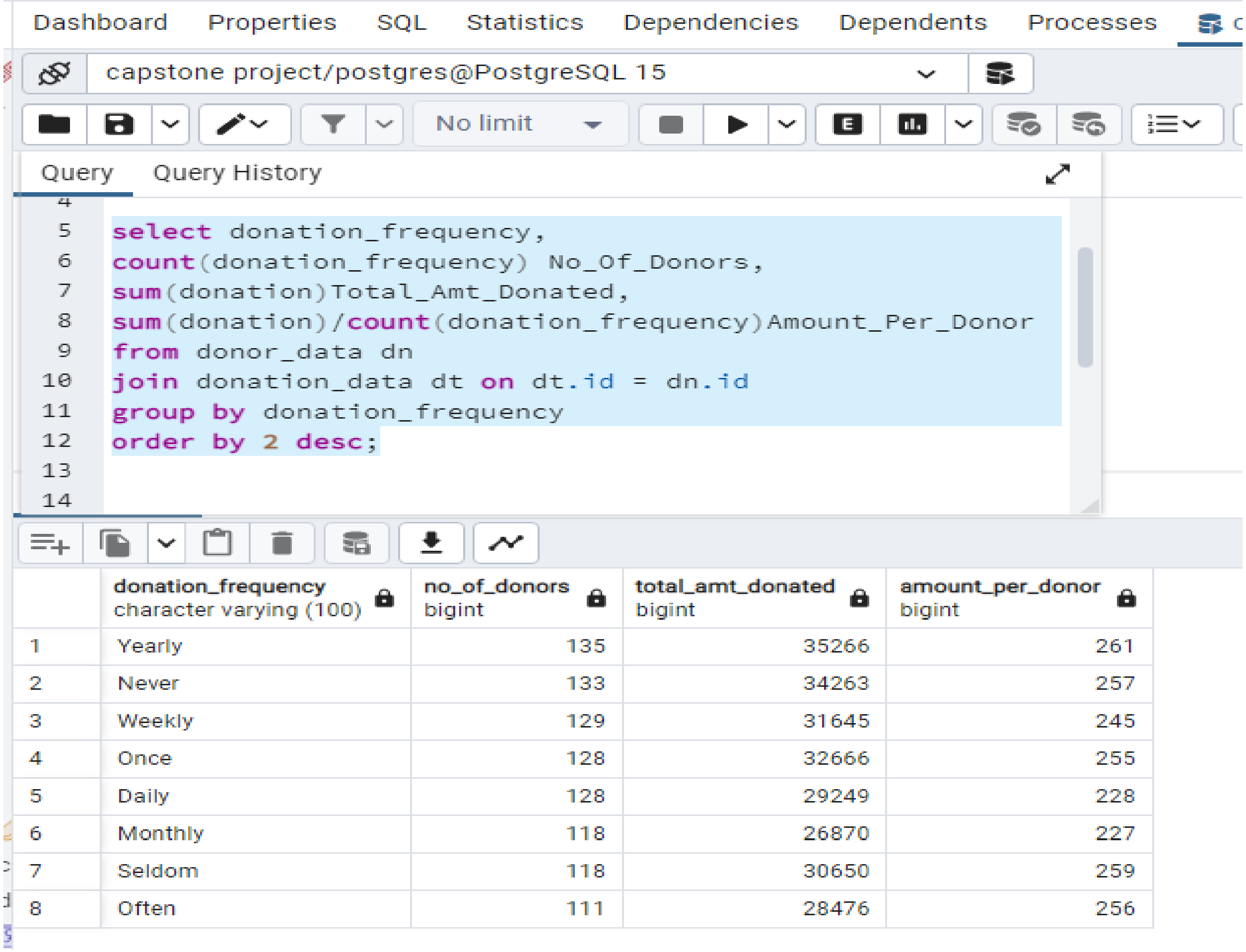


```
select donation_frequency,
count(donation_frequency) No_Of_Donors,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by donation_frequency
order by 4 desc;
```

	donation_frequency character varying (100)	no_of_donors bigint	total_amt_donated bigint	amount_per_donor bigint
1	Yearly	135	35266	261
2	Seldom	118	30650	259
3	Never	133	34263	257
4	Often	111	28476	256
5	Once	128	32666	255
6	Weekly	129	31645	245
7	Daily	128	29249	228
8	Monthly	118	26870	227

Quick Analysis 2 (no. of donors)

When the data is sorted by number of donors in relation to donation frequency (See screenshot), the yearly donors have 24 members more than donors categorized as "often" and 17 more members to both "seldom" and "monthly".



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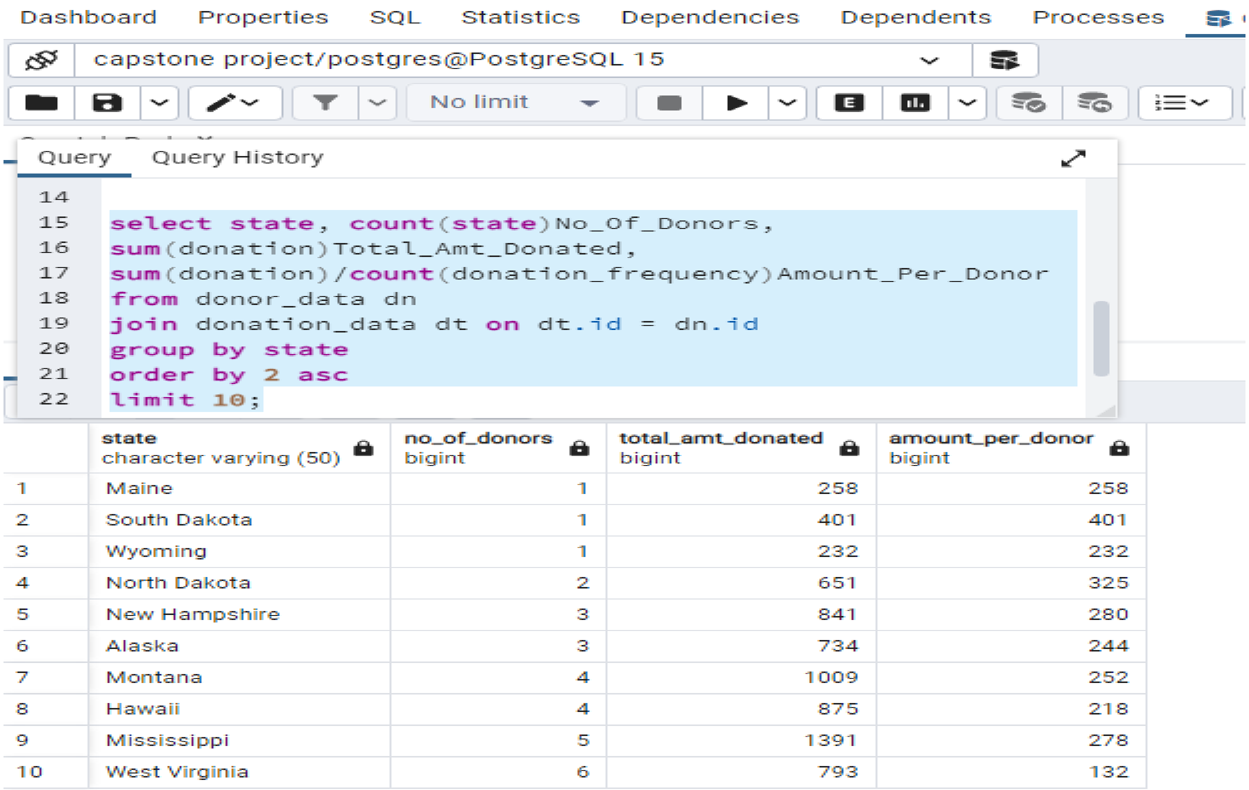
No limit

```
select donation_frequency,
count(donation_frequency) No_Of_Donors,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by donation_frequency
order by 2 desc;
```

	donation_frequency character varying (100)	no_of_donors bigint	total_amt_donated bigint	amount_per_donor bigint
1	Yearly	135	35266	261
2	Never	133	34263	257
3	Weekly	129	31645	245
4	Once	128	32666	255
5	Daily	128	29249	228
6	Monthly	118	26870	227
7	Seldom	118	30650	259
8	Often	111	28476	256

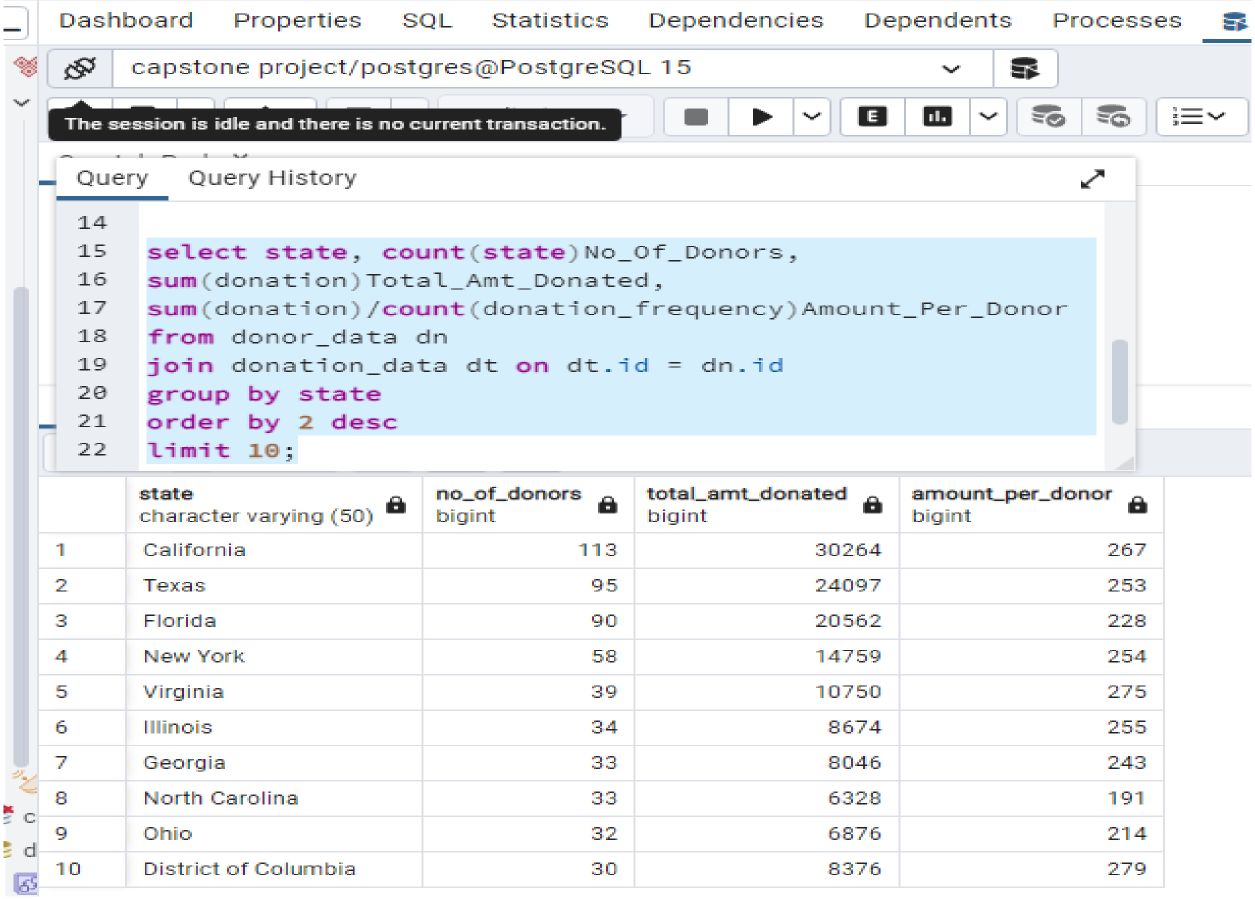
Quick Analysis 3 (no. of donors per state)

The two screenshots below are self-explanatory. In perspective, there are more donors in big cities like California (113), Texas (95), Florida (90) and New York (58), compared to small towns/cities like Maine (1), South Dakota (1), Wyoming (1), North Dakota (2) etc.



```sql
select state, count(state)No_Of_Donors,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by state
order by 2 asc
limit 10;
```

	state character varying (50)	no_of_donors bigint	total_amt_donated bigint	amount_per_donor bigint
1	Maine	1	258	258
2	South Dakota	1	401	401
3	Wyoming	1	232	232
4	North Dakota	2	651	325
5	New Hampshire	3	841	280
6	Alaska	3	734	244
7	Montana	4	1009	252
8	Hawaii	4	875	218
9	Mississippi	5	1391	278
10	West Virginia	6	793	132



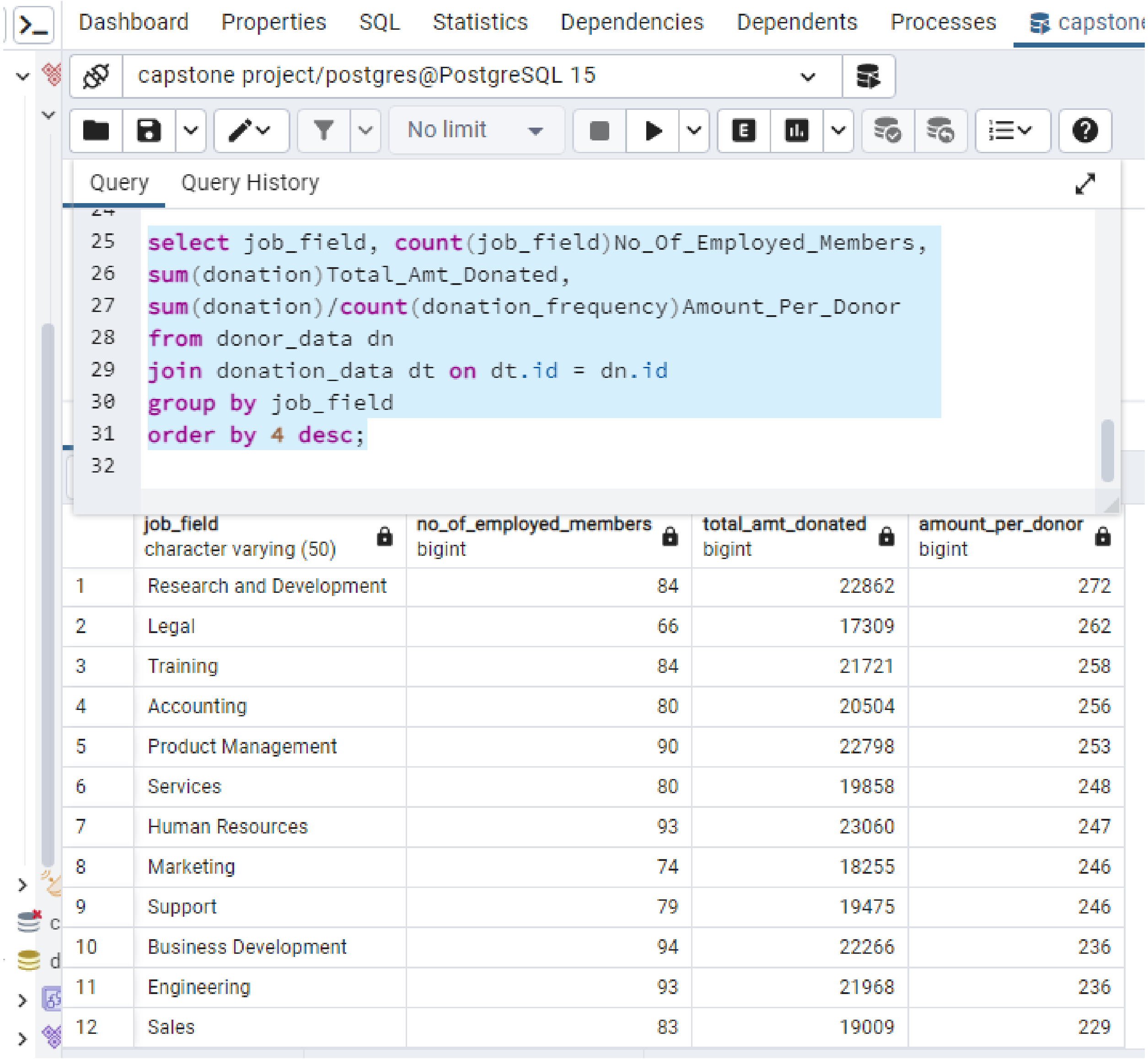
The session is idle and there is no current transaction.

```sql
select state, count(state)No_Of_Donors,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by state
order by 2 desc
limit 10;
```

	state character varying (50)	no_of_donors bigint	total_amt_donated bigint	amount_per_donor bigint
1	California	113	30264	267
2	Texas	95	24097	253
3	Florida	90	20562	228
4	New York	58	14759	254
5	Virginia	39	10750	275
6	Illinois	34	8674	255
7	Georgia	33	8046	243
8	North Carolina	33	6328	191
9	Ohio	32	6876	214
10	District of Columbia	30	8376	279

Quick Analysis 4 (amount donated by job type)

It can be seen in the screenshot, donors from R&D, legal, training, accounting and product management are our biggest contributors per individual at $272, $262, $258, $256 and $253 respectively. Sales is pulling last at $229 per individual contributor, followed by donors from engineering and business development.

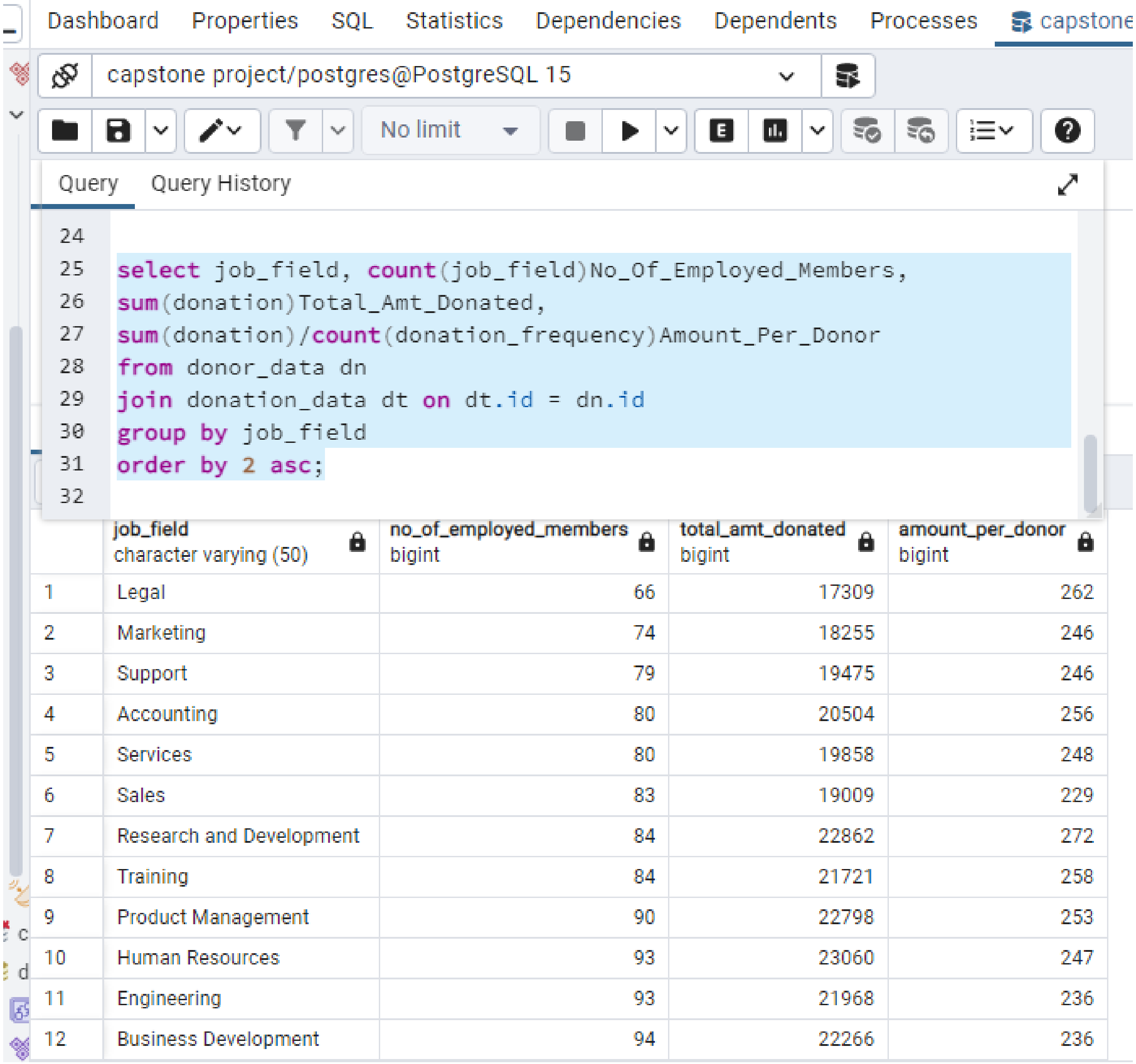


```sql
select job_field, count(job_field)No_Of_Employed_Members,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by job_field
order by 4 desc;
```

	job_field character varying (50)	no_of_employed_members bigint	total_amt_donated bigint	amount_per_donor bigint
1	Research and Development	84	22862	272
2	Legal	66	17309	262
3	Training	84	21721	258
4	Accounting	80	20504	256
5	Product Management	90	22798	253
6	Services	80	19858	248
7	Human Resources	93	23060	247
8	Marketing	74	18255	246
9	Support	79	19475	246
10	Business Development	94	22266	236
11	Engineering	93	21968	236
12	Sales	83	19009	229

Quick Analysis 5 (job type donors)

According to the screenshot below, we have lower numbers of donors from legal, marketing, support, accounting and services compared to those from business development, engineering, HR and product management.



```sql

select job_field, count(job_field)No_Of_Employed_Members,
sum(donation)Total_Amt_Donated,
sum(donation)/count(donation_frequency)Amount_Per_Donor
from donor_data dn
join donation_data dt on dt.id = dn.id
group by job_field
order by 2 asc;

```

	job_field	no_of_employed_members	total_amt_donated	amount_per_donor
	character varying (50)	bigint	bigint	bigint
1	Legal	66	17309	262
2	Marketing	74	18255	246
3	Support	79	19475	246
4	Accounting	80	20504	256
5	Services	80	19858	248
6	Sales	83	19009	229
7	Research and Development	84	22862	272
8	Training	84	21721	258
9	Product Management	90	22798	253
10	Human Resources	93	23060	247
11	Engineering	93	21968	236
12	Business Development	94	22266	236

Recommendations

- We have to encourage those who donate monthly to donate more. For instance, their individual amount is only $34 short of the highest yearly donors. They only need to add $2.83 to their monthly donations to meet match their yearly counterparts. Those in-between can also be encouraged to do this.

- We have to get more donors who will donate often, monthly or seldomly, as we are short of members in those areas.

- We need to reach out to the small cities like Maine, South Dakota, Wyoming, North Dakota etc, to encourage more people to contribute to the course. There should be an effort to have outreach programs in these towns and cities.

- We need to be more pro-active in encouraging our donors from sales, engineering and business development to add a little more to their previous contributions, so that they can match their counterparts from R&D and legal.

- Our donors under the legal job field need to be encouraged to bring awareness to their colleagues, since they are our second highest contributors in terms of average amount donated, but the least participating members. We also really need to encourage our donors from marketing and support to involve their colleagues as well.