EDUCATION FOR ALL FUNDRAISING SQL CASE STUDY

The solutions to the tasks are attached below:

Query | Query History

```
1  select *
2  from donation_data;
3
4  select *
5  from donor_data;
6
7  --1. How much is the total donation?
8  Select round(sum(donation),2) Total_donation
9  from donation_data;
```

Data Output | Messages | Notifications

	total_donation numeric
1	249085.00

```
10
11  --2. What is the total doantion by gender?
12  Select gender, round(sum(donation),2) Total_donation
13  from donation_data
14  group by 1;
```

Data Output | Messages | Notifications

	gender character varying (50)	total_donation numeric
1	Female	121457.00
2	Male	127628.00

```sql
--3. Show the total donation and number of donations by gender
Select gender,round(sum(donation),2) Total_donation, count(donation) number_of_donations
from donation_data
group by 1;

```

Data Output | Messages | Notifications

	gender character varying (50)	total_donation numeric	number_of_donations bigint
1	Female	121457.00	508
2	Male	127628.00	492

```sql
--4. Total donation made by frequncy of donation

select donation_frequency, sum(donation)
from donor_data
join donation_data on donation_data.id=donor_data.id
group by donation_frequency;
```

Data Output | Messages | Notifications

	donation_frequency character varying (100)	sum 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

Query | Query History

```sql
--5. Total donationa and number of donation by job field

select job_field, round(sum(donation),2)  Total_donation, count(donation) Number_of_donation
from donation_data
group by 1
order  by 2 desc;
```

Data Output | Messages | Notifications

	job_field character varying (50)	total_donation numeric	number_of_donation bigint
1	Human Resources	23060.00	93
2	Research and Development	22862.00	84
3	Product Management	22798.00	90
4	Business Development	22266.00	94
5	Engineering	21968.00	93
6	Training	21721.00	84
7	Accounting	20504.00	80
8	Services	19858.00	80
9	Support	19475.00	79
10	Sales	19009.00	83
11	Marketing	18255.00	74
12	Legal	17309.00	66

Total rows: 12 of 12 | Query complete 00:00:00.068

```sql
--6. Total donation and number of donations above $200
Select round(sum(donation),2) Total_donation_above_$200, count(donation) number_of_donations
from donation_data
where donation > 200;
```

Data Output | Messages | Notifications

	total_donation_above_$200 numeric	number_of_donations bigint
1	205892.00	586

```
--7. Total donation and number of donations below $200
Select round(sum(donation),2) Total_donation_below_$200, count(donation) number_of_donations
from donation_data
where donation < 200;
```

Data Output | Messages | Notifications

	total_donation_below_$200 numeric	number_of_donations bigint
1	42593.00	411

```sql
--8. Which top 10 states contributes the highest donations?
Select state, round(sum(donation),2) Total_donation
from donation_data
group by 1
order by 2 desc
limit 10;
```

Data Output | Messages | Notifications

	state character varying (50)	total_donation numeric
1	California	30264.00
2	Texas	24097.00
3	Florida	20562.00
4	New York	14759.00
5	Virginia	10750.00
6	Illinois	8674.00
7	District of Columbia	8376.00
8	Tennessee	8316.00
9	Georgia	8046.00
10	Ohio	6876.00

```sql
--9. Top 10 states contributes the least donations
Select state state_with_least_donations, round(sum(donation),2) Total_donation
from donation_data
group by 1
order by 2
limit 10;
```

Data Output | Messages | Notifications

	state_with_least_donations character varying (50)	total_donation numeric
1	Wyoming	232.00
2	Maine	258.00
3	South Dakota	401.00
4	North Dakota	651.00
5	Alaska	734.00
6	West Virginia	793.00
7	South Carolina	819.00
8	New Hampshire	841.00
9	Hawaii	875.00
10	Montana	1009.00

```sql
--10. Top 10 cars driven by the highest donors

select donor_data.id, first_name, last_name, sum(donation), car
from donor_data
join donation_data on donation_data.id = donor_data.id
group by donor_data.id, first_name, last_name, car
order by sum(donation) desc
limit 10;
```

Data Output | Messages | Notifications

	id integer	first_name character varying (50)	last_name character varying (50)	sum bigint	car character varying (100)
1	139	Beverlie	Andriesse	500	Ford
2	264	Wallie	Leather	500	Lexus
3	35	Clevie	Camilletti	499	Buick
4	769	Peder	Rilton	499	Mazda
5	480	Worthy	Le feaver	498	MINI
6	965	Amalea	Knill	497	Hyundai
7	969	Nathaniel	McGenn	494	GMC
8	76	Tonnie	Stockney	494	Chevrolet
9	500	Corbett	Lansdale	494	Dodge
10	565	Beverlee	Camacke	493	Ford

Insights:

1. The males donated more than the females despite having more female donors than males.
2. The highest number of donors are in the Business Development job field while those in the Human Resources donated the highest funds.
3. More than half of the donors donated $200.
4. Donors who reside in California gave the highest donations while those in Wyoming donated the least amount.
5. The highest donors donated $500 and they use Ford and Lexus cars.

Recommendations:

1. The donors should be encouraged to invite more donors and they get acknowledged for doing that.
2. The amount donated often, daily, and weekly is small. Reminders and a form of points should be given for every donation made. At the end of the year, the persons with the highest points get to be presented with an honour.
3. Those who donated the least amount are in the legal profession and should be encouraged to donate more often as well as those in the Human Resources filed.