SQL QUERIES, REPORTS & INSIGHTS

Total donations

```
SELECT SUM (donation) AS total_donation
FROM donation_data;
```

	total_donation bigint
1	249085

Total donations and number of donations by gender

```
SELECT gender, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data
GROUP BY gender;
```

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

Frequency of donations

```
SELECT donation_frequency, SUM (donation) AS total_donation, COUNT (donation) AS
number_of_donations
FROM donation_data a
JOIN donor_data b
ON a.id = b.id
GROUP BY donation_frequency;
```

	donation_frequency character varying (150)	total_donation bigint	number_of_donations bigint
1	Once	32666	128
2	Weekly	31645	129
3	Daily	29249	128
4	Yearly	35266	135
5	Seldom	30650	118
6	Monthly	26870	118
7	Often	28476	111
8	Never	34263	133

Donation contributions by job field

```
SELECT job_field, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
GROUP BY job_field
ORDER BY total_donation DESC;
```

	job_field character varying (50)	total_donation bigint	number_of_donations bigint
1	Human Resources	23060	93
2	Research and Development	22862	84
3	Product Management	22798	90
4	Business Development	22266	94
5	Engineering	21968	93
6	Training	21721	84
7	Accounting	20504	80
8	Services	19858	80
9	Support	19475	79
10	Sales	19009	83
11	Marketing	18255	74
12	Legal	17309	66

Top 10 states with the most contributions

```
SELECT state, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
GROUP BY state
ORDER BY total_donation DESC
LIMIT 10;
```

	state character varying (50)	total_donation bigint	number_of_donations bigint
1	California	30264	113
2	Texas	24097	95
3	Florida	20562	90
4	New York	14759	58
5	Virginia	10750	39
6	Illinois	8674	34
7	District of Columbia	8376	30
8	Tennessee	8316	30
9	Georgia	8046	33
10	Ohio	6876	32

Top 10 states with the least contributions

```
SELECT state, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
GROUP BY state
ORDER BY total_donation ASC
LIMIT 10;
```

	state character varying (50)	total_donation bigint	number_of_donations bigint
1	Wyoming	232	1
2	Maine	258	1
3	South Dakota	401	1
4	North Dakota	651	2
5	Alaska	734	3
6	West Virginia	793	6
7	South Carolina	819	6
8	New Hampshire	841	3
9	Hawaii	875	4
10	Montana	1009	4

Cars driven by donors with the most donations

```
SELECT car, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
JOIN donor_data b
ON a.id = b.id
GROUP BY car
ORDER BY total_donation DESC
LIMIT 10;
```

	car character varying (50)	total_donation bigint	number_of_donations bigint
1	Ford	22706	91
2	Chevrolet	19875	78
3	Toyota	14123	51
4	GMC	10145	39
5	Mitsubishi	10001	44
6	Dodge	9479	36
7	Pontiac	9331	40
8	Honda	9201	32
9	Volkswagen	8964	36
10	BMW	8608	32

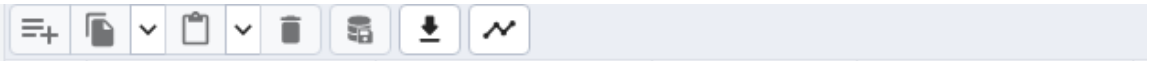
University affiliation of donors

```
SELECT university, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
JOIN donor_data b
ON a.id = b.id
GROUP BY university
ORDER BY total_donation DESC
LIMIT 10;
```

	university character varying (150)	total_donation bigint	number_of_donations bigint
1	[null]	116977	459
2	University of Agriculture and Veterinary Medicine Ia...	907	2
3	Drexel University	882	2
4	Universidad Tecnológica de Honduras	849	2
5	University of Akron	780	2
6	Lorestan University	712	2
7	Bluefield College	602	2
8	Bauhaus Universität Weimar	535	2
9	Université Pierre Mendes-France (Grenoble II)	509	2
10	Vyatka State Pedagogical University	500	2

States bringing in the most daily donations

```
SELECT donation_frequency, state, SUM (donation) AS total_donation, COUNT (donation) AS number_of_donations
FROM donation_data a
JOIN donor_data b
ON a.id=b.id
GROUP BY donation_frequency, state
HAVING donation_frequency = 'Daily'
ORDER BY total_donation DESC
LIMIT 10;
```



	donation_frequency character varying (150)	state character varying (50)	total_donation bigint	number_of_donations bigint
1	Daily	California	3714	15
2	Daily	Texas	2482	10
3	Daily	Virginia	1760	7
4	Daily	Nevada	1573	6
5	Daily	Georgia	1329	7
6	Daily	District of Columbia	1314	6
7	Daily	Tennessee	1237	6
8	Daily	New York	1162	5
9	Daily	Ohio	1153	6
10	Daily	Connecticut	920	3

Job fields in the state contributing the highest donations

```
SELECT donation_frequency, job_field state, SUM (donation) AS total_donation
FROM donation_data a
JOIN donor_data b
ON a.id=b.id
GROUP BY donation_frequency, job_field, state
HAVING donation_frequency = 'Daily' AND state = 'California'
ORDER BY total_donation DESC
LIMIT 10;
```

	donation_frequency character varying (150)	state character varying (50)	total_donation bigint
1	Daily	Engineering	627
2	Daily	Business Development	601
3	Daily	Human Resources	566
4	Daily	Marketing	477
5	Daily	Services	446
6	Daily	Training	416
7	Daily	Product Management	409
8	Daily	Sales	149
9	Daily	Support	23

Donations based on gender and state

```
SELECT gender, state, SUM (donation) AS total_donation
FROM donation_data
GROUP BY gender, state
ORDER BY total_donation DESC
LIMIT 10;
```

	gender character varying (50)	state character varying (50)	total_donation bigint
1	Male	California	16836
2	Male	Texas	13687
3	Female	California	13428
4	Female	Florida	10465
5	Female	Texas	10410
6	Male	Florida	10097
7	Male	New York	7408
8	Female	New York	7351
9	Male	Virginia	6298
10	Male	Ohio	4810

Donor information for souvenir

```
SELECT a.id, first_name|| ' ' || last_name AS donor_name, shirt_size, favourite_colour, donation
FROM donation_data a
JOIN donor_data b
ON a.id = b.id
GROUP BY shirt_size, favourite_colour, donation, a.id, first_name, last_name
HAVING donation BETWEEN 400 AND 500
ORDER BY donation DESC
LIMIT 10;
```

	id integer	donor_name text	shirt_size character varying (50)	favourite_colour character varying (150)	donation integer
1	264	Wallie Leather	3XL	Blue	500
2	139	Beverlie Andriesse	S	Yellow	500
3	769	Peder Rilton	L	Puce	499
4	35	Clevie Camilletti	S	Fuscia	499
5	480	Worthy Le feaver	XL	Yellow	498
6	965	Amalea Knill	2XL	Turquoise	497
7	76	Tonnie Stockney	2XL	Maroon	494
8	969	Nathaniel McGenn	2XL	Purple	494
9	500	Corbett Lansdale	3XL	Mauv	494
10	565	Beverlee Camacke	L	Red	493

RECOMMENDATIONS

1. Number of donors,

The sum of donation from donors not affiliated with any university is about 50% of the total donation. This might be as a result of missing information or due to the fact that donors never attended universities. If as a result of missing information, appreciation emails can be sent to donors, with subsequent request for their universities. Advocacy to such universities, and also to universities with low total donation could increase the number of donors.

In addition to appreciation emails, logo-crested t-shirts in favourite colour can be given to donors who donate above 400. This can be clearly stated among the donor souvenirs to improve donation.

2. Donation frequency

Generally, the sum of donations yearly or one-time are the most, perhaps an awareness can be done in months preceding to the charity event, as donors have showed an affinity to contribute more if not required too often.

California, however, is the top state with daily contributions. Thus, the model used in the state can be applied to other states, as this method ensured California provided highest donation to the charity.

3. Value of donations.

It might be important to focus on the top 5 job fields, Human Resources, Research & Development, Product Management, Business Development and Engineering contributing to the highest number of donations, and also number of donations. HR, R & D, and Business Development are also the fields contributing the most in California, the state with the highest donation. These fields can therefore increase the number of donors and value of donation.

A record of the gender contributing the most in highest donor states would provide information on the effort needed to reach genders that are not well represented. The same could apply in lowest donor states.