

**ONOVUGHAKPO RUTH OGOCHUKWU**

**CAPSTONE PROJECT FOR SQL**

# SOLUTION A

```
1 ---How much is the total donation?
2 select sum(donation) as Total_Donation
3 from donation_data;
4
5
6
7
8 |
```

Data Output Messages Notifications

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

# SOLUTION B

```
8 ---What is the total donation by gender?
9 select gender, sum(donation) as Total_Donation
10 from donation_data
11 group by gender;
12
```

Data Output Messages Notifications

	<b>gender</b> character varying (50) 🔒	<b>total_donation</b> bigint 🔒
1	Female	121457
2	Male	127628

# SOLUTION C

```
13 ---Show the total donation and number of donations by gender
14 select count(donation) as NumberOfDonations, gender, sum(donation) as Total_Donation
15 from donation_data
16 group by gender;
17
```

Data Output Messages Notifications



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

# SOLUTION D

```
18 ---Total donation made by frequency of donation
19 select donation_frequency,
20 sum (donation_data.donation) as Total_Donation
21 from donor_data
22 join donation_data
23 on donor_data.id = donation_data.id
24 group by donation_frequency;
25
26
27
```

Data Output Messages Notifications



	donation_frequency character varying (100) 🔒	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

# SOLUTION E

```
28 ---Total donation and number of donation by Job field
29 select count(donation) as NumberOfDonation, job_field, sum(donation) as Total_Donation
30 from donation_data
31 group by job_field;
32
```

Data Output Messages Notifications



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

# SOLUTION F

```
33 ---Total donation and number of donations above $200
34 select count(donation) as NumberOfDonationAbove200, sum(donation) as Total_Donation
35 from donation_data
36 where donation > 200;
```

Data Output Messages Notifications











	numberofdonationabove200 bigint	total_donation bigint
1	586	205892

# SOLUTION G

```
38 ---Total donation and number of donations below $200
39 select count(donation) as NumberOfDonationBelow200, sum(donation) as Total_Donation
40 from donation_data
41 where donation < 200;
42
```

Data Output Messages Notifications

       		
	numberofdonationbelow200 bigint	total_donation bigint
1	411	42593



# SOLUTION H

```
43 ---Which top 10 states contributes the highest donations
44 select state, sum(donation) as Total_Donation
45 from donation_data
46 group by state
47 order by Total_Donation desc
48 limit 10;
49
```

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

# SOLUTION I

```
---Which top 10 states contributes the least donations
select state, sum(donation) as Total_Donation
from donation_data
group by state
order by Total_Donation asc
limit 10;
```

Output Messages Notifications

state character varying (50)	total_donation bigint
Wyoming	232
Maine	258
South Dakota	401
North Dakota	651
Alaska	734
West Virginia	793
South Carolina	819
New Hampshire	841
Hawaii	875
Montana	1009

# SOLUTION J

```
58 ---What are the top 10 cars driven by the highest donors
59 select car,
60 sum(donation_data.donation) as Total_Donation
61 from donation_data
62 left join donor_data
63 on donation_data.id = donor_data.id
64 group by car
65 order by Total_Donation desc
66 limit 10;
67
```

Data Output Messages Notifications



	car character varying (100) 🔒	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

# RECOMMENDATIONS

Based on the insights generated from the solutions, you can consider to increase the number of donors in the database:

1. **Targeted Marketing Campaigns:** Utilize the information from the donation frequency analysis to make marketing campaigns aimed at different segments of donors. You can create personalized messages and targeted initiatives to encourage more individuals to donate.
2. **Donor Education and Awareness:** The insight can be used to educate potential donors about the importance and impact of regular donations. Raise awareness about the benefits of consistent giving and the value it brings to the organization's mission. This can be communicated through various channels, such as social media, newsletters, or targeted email campaigns.
3. **Peer-to-Peer Fundraising:** Encourage existing donors to become ambassadors for your cause by creating peer-to-peer fundraising opportunities by sharing their stories and experiences, motivating their network of family, friends, and colleagues to contribute.
4. **Collaborations and Partnerships:** Seek collaborations and partnerships with other organizations or businesses that align with your cause.
5. **Enhance Online Donor Experience:** Ensure your organization's website and online presence provide a user-friendly and seamless donor experience.
6. **Donor Incentives and Recognition:** Consider offering donor incentives and recognition programs to acknowledge and thank individuals for their contributions. From small tokens of appreciation to naming opportunities or exclusive donor benefits, these initiatives can motivate individuals to donate and feel appreciated for their support.

# RECOMMENDATIONS

Based on the insights generated from the solutions, I recommend to increase the donation frequency of donors by:

1. Donor Communication and Engagement: Establish a strong and consistent communication strategy to engage donors. Regularly update them on the impact of their donations, share success stories, and provide ongoing information about your organization's projects and initiatives to build a deeper connection and make them contribute more.
2. Donor Incentives: Implementing a rewards or recognition system for donors who contribute regularly and increase their frequency of donations.
3. Donor Feedback and Involvement: Actively seek feedback from your donors to understand their motivations, preferences, and concerns to create a sense of ownership and loyalty.
4. Gamification and Challenge Campaigns: Create friendly competition among donors by setting goals or milestones and publicly recognizing those who achieve them. This fosters a sense of excitement, camaraderie, and motivation for donors to increase their giving frequency.

# RECOMMENDATIONS

Based on the insights generated from the solutions, I recommend to increase the value of donations in the database by:

1. **Major Donor Cultivation:** Identify donors who consistently give larger amounts or have the potential to make significant contributions. Cultivate personal relationships through one-on-one meetings, exclusive events, and personalized updates. Show them the impact of their donations, involve them in decision-making processes, and provide opportunities for naming rights or other forms of recognition.
2. **Storytelling and Impact Communication:** Share compelling stories that showcase the tangible impact of donations. Use real-life examples, testimonials, and success stories to demonstrate how larger contributions make a meaningful difference. Emphasize the transformative power of larger donations and how they directly contribute to your organization's mission.
3. **Planned Giving and Legacy Programs:** Promote planned giving options to donors who have demonstrated a long-term commitment. Provide information about trusts, or other planned giving methods that allow donors to make substantial contributions beyond their lifetime. Establish a legacy program that recognizes and honors individuals who include your organization in their estate plans.
4. **Matching Gift Programs:** Encourage donors to maximize their impact through matching gift programs. Partner with corporations or foundations willing to match donations, effectively doubling or even tripling the value of each contribution. Clearly communicate the availability and benefits of matching gift programs to donors, motivating them to contribute more generously.