

1.Part 1 : Set up

charity ▼

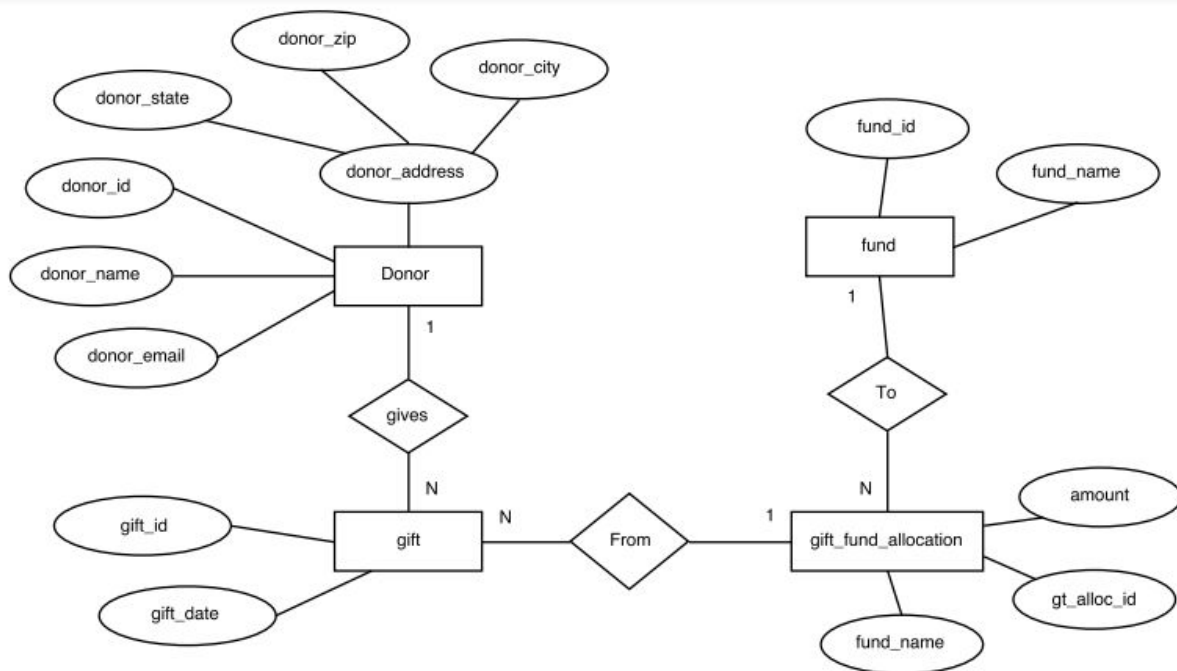
```
1 SHOW TABLE STATUS;
```

Output Result 2 ✕

4 rows

	Name	Engine	Version	Row_format	Rows	Avg_row_length	Data_length	Max_data_length	Index_length	Data_fi
1	donor	InnoDB	10	Dynamic	50	327	16384	0	0	
2	fund	InnoDB	10	Dynamic	5	3276	16384	0	0	
3	gift	InnoDB	10	Dynamic	725	67	49152	0	16384	
4	gift_fund_allocation	InnoDB	10	Dynamic	2218	51	114688	0	131072	

2.Part 2 : Data Model



3. Part 3 : SQL Queries

1. All gifts received in the year 2012.

```
Tx: Auto charity
-- 1. All gifts received in the year 2012
SELECT gift_id, donor_id, gift_date
FROM gift
WHERE EXTRACT(YEAR FROM gift_date) = 2012;
```

	gift_id	donor_id	gift_date
1	963	3	2012-09-19
2	966	3	2012-07-01
3	968	4	2012-03-08
4	978	4	2012-12-06
5	981	4	2012-10-07
6	983	4	2012-12-09
7	985	4	2012-10-08

2. All donors in the state of Texas(TX).

```
Tx: Auto charity
-- 2. All donors in the state of Texas(TX)
SELECT donor_id, donor_name, donor_state
FROM donor
WHERE donor_state LIKE 'TX';
```

	donor_id	donor_name	donor_state
1	17	Lois Dixon	TX
2	18	Nancy Perkins	TX
3	33	Sean Thomas	TX
4	35	Steven Garcia	TX
5	38	Billy Johnston	TX
6	39	Betty Murphy	TX

3. All donations to the 'Cat Sheltering' fund in 2011, ordered in increasing order by date.

```
Tx: Auto  charity ▼
-- 3. All donations to the 'Cat Sheltering' fund in 2011,
--    ordered in increasing order by date.
SELECT gift_id, donor_id, fund_name, gift_date
FROM gift
JOIN fund
WHERE fund_name LIKE 'Cat Sheltering'
AND EXTRACT(YEAR FROM gift_date) = 2011
ORDER BY gift_date;
```

	gift_id	donor_id	fund_name	gift_date
1	1458	37	Cat Sheltering	2011-01-01
2	1137	13	Cat Sheltering	2011-01-08
3	1325	28	Cat Sheltering	2011-01-19
4	950	1	Cat Sheltering	2011-01-24
5	1384	33	Cat Sheltering	2011-01-27
6	1178	16	Cat Sheltering	2011-01-27
7	1435	36	Cat Sheltering	2011-02-06

4. The name of every donor who gave a gift in 2012.

```
Tx: Auto  charity ▼
-- 4. The name of every donor who gave a gift in 2012.
SELECT DISTINCT EXTRACT(YEAR FROM gift_date) AS donation_year, donor_id, donor_name
FROM gift
JOIN donor a USING (donor_id)
WHERE EXTRACT(YEAR FROM gift_date) = 2012;
```

	donation_year	donor_id	donor_name
1	2012	3	Melissa Gibson
2	2012	4	Albert Grant
3	2012	5	Howard Willis
4	2012	6	Evelyn Larson
5	2012	7	Rose Ray
6	2012	9	Bobby Jones
7	2012	10	Adam Phillips

5. The total amount received in each year.

```
-- 5. The total amount received in each year
SELECT EXTRACT(YEAR FROM gift_date) AS each_year, count(amount) AS total_amount
FROM gift
JOIN gift_fund_allocation
GROUP BY each_year;
```

	each_year	total_amount
1	2005	192966
2	2006	175222
3	2007	195184
4	2008	170786
5	2009	186312
6	2010	139734
7	2011	128644

6. The total amount received in each month of 2007.

```
-- 6. The total amount received in each month of 2007.
SELECT EXTRACT(YEAR FROM gift_date) AS year,
EXTRACT(MONTH FROM gift_date) AS month,
SUM(amount) AS total_amount
FROM donor
JOIN gift g ON donor.donor_id = g.donor_id
JOIN gift_fund_allocation a ON g.gift_id = a.gift_id
JOIN fund f ON a.fund_id = f.fund_id
WHERE EXTRACT(YEAR FROM gift_date) = 2007
GROUP BY year, month;
```

	year	month	total_amount
1	2007	1	6612
2	2007	2	17268
3	2007	3	15083
4	2007	4	1815
5	2007	5	7965
6	2007	6	7237
7	2007	7	12663

7. For donor 35, the gifts they gave in 2007 with the date and total amount of each gift.

```
-- 7. For donor 35, the gifts they gave in 2007 with the date and total
-- amount of each gift.
SELECT gift.donor_id, gift.gift_id, gift_date, SUM(amount) AS total_amount
FROM donor
  JOIN gift ON donor.donor_id = gift.donor_id
  JOIN gift_fund_allocation a ON gift.gift_id = a.gift_id
  JOIN fund f ON a.fund_id = f.fund_id
WHERE gift.donor_id = 35
      AND EXTRACT(YEAR FROM gift_date) = 2007
GROUP BY gift.gift_id;
```

	donor_id	gift_id	gift_date	total_amount
1	35	1411	2007-08-05	1500
2	35	1414	2007-05-03	1597
3	35	1417	2007-05-15	787
4	35	1418	2007-09-16	576
5	35	1419	2007-03-12	1182
6	35	1423	2007-12-27	736

8. For donor 35, the funds to which they contributed in 2007 with the total amount contributed to each fund.

```
-- 8. For donor 35, the funds to which they contributed in 2007
-- with the total amount contributed to each fund.
SELECT DISTINCT donor.donor_id, donor_name, fund_name, SUM(amount) AS total_amount
FROM donor
  JOIN gift ON donor.donor_id = gift.donor_id
  JOIN gift_fund_allocation a ON gift.gift_id = a.gift_id
  JOIN fund f ON a.fund_id = f.fund_id
WHERE donor.donor_id = 35
      AND EXTRACT(YEAR FROM gift_date) = 2007
GROUP BY fund_name;
```

	donor_id	donor_name	fund_name	total_amount
1	35	Steven Garcia	Cat Sheltering	2418
2	35	Steven Garcia	Dog Sheltering	1058
3	35	Steven Garcia	General / Operations	2902

9. The names and full addresses of the top 5 donors in 2010, with their total donations, in decreasing order of total donations.

```
-- 9. The names and full addresses of the top 5 donors in 2010, with
-- their total donations, in decreasing order of total donations.
SELECT donor.donor_id, donor_name, donor_address, donor_city, donor_state,
       donor_zip, SUM(amount) AS total_donation
FROM donor
  JOIN gift g ON donor.donor_id = g.donor_id
  JOIN gift_fund_allocation a ON g.gift_id = a.gift_id
WHERE EXTRACT(YEAR FROM gift_date) = 2010
GROUP BY donor.donor_id
ORDER BY total_donation DESC
LIMIT 5;
```

	donor_id	donor_name	donor_address	donor_city	donor_state	donor_zip	total_donation
1	50	Jeremy Snyder	57 Saint Paul Hill	West Springfield	MA	07878	9198
2	39	Betty Murphy	0689 Moland Street	Flower Mound	TX	56610	8686
3	5	Howard Willis	05452 Mallard Place	Tinton Falls	NJ	72760-1745	6817
4	19	Lois Castillo	60 Warner Plaza	Vestavia Hills	AL	85193	5786
5	37	Nancy Simpson	5 Dawn Place	Randolph	MA	67406-5327	4660

10. The list of Dog Lovers: everyone who has donated to Dog Sheltering. Do not include duplicates.

```
-- 10. The list of Dog Lovers: everyone who has donated to Dog
-- Sheltering. Do not include duplicates.
SELECT DISTINCT donor.donor_id, donor_name
FROM donor
  JOIN gift g ON donor.donor_id = g.donor_id
  JOIN gift_fund_allocation a ON g.gift_id = a.gift_id
  JOIN fund f ON a.fund_id = f.fund_id
WHERE fund_name LIKE 'Dog Sheltering'
```

	donor_id	donor_name
1	1	George Coleman
2	2	Todd Burton
3	3	Melissa Gibson
4	4	Albert Grant
5	5	Howard Willis
6	6	Evelyn Larson
7	7	Rose Ray