TABLES:

CREATE TABLE accounts.donations

(

accountid character varying(30) NOT NULL,

city character varying(30) NOT NULL,

year integer NOT NULL,

givings double precision,

avggivings double precision,

donlevel integer,

CONSTRAINT p\_key PRIMARY KEY (accountid, city, year)

);

CREATE TABLE accounts.cities

(

city character varying(30) NOT NULL,

country character varying(30) NOT NULL,

postcode character varying(12),

state character varying(30),

CONSTRAINT c\_key PRIMARY KEY (city)

);

CREATE TABLE accounts.donors

(

accountid character varying(30) NOT NULL,

accountnum character varying(30) NOT NULL,

accountsubtype character varying(40),

accounttype character varying(30),

assignedto character varying(40),

ismajor boolean,

donlevel integer,

CONSTRAINT d\_key PRIMARY KEY (accountid),

CONSTRAINT donors\_accountnum\_key UNIQUE (accountnum)

);

VIEWS:

CREATE OR REPLACE VIEW accounts.lvlyear AS

SELECT donations.donlevel, donations.year, sum(donations.givings) AS givings, avg(donations.avggivings) AS avggivings

FROM accounts.donations

GROUP BY donations.donlevel, donations.year;

CREATE OR REPLACE VIEW accounts.nameyear AS

SELECT donors.assignedto, donations.year, sum(donations.givings) AS givings,

avg(donations.avggivings) AS avggivings

FROM accounts.donations, accounts.donors

WHERE donations.accountid = donors.accountid

GROUP BY donors.assignedto, donations.year;

CREATE OR REPLACE VIEW accounts.stat AS

SELECT cities.state, cities.country, sum(donations.givings) AS givings,

avg(donations.avggivings) AS avggivings

FROM accounts.donations, accounts.cities

WHERE donations.city = cities.city

GROUP BY cities.state, cities.country;

QUERIES:

Q1.

select assignedto,year,givings

from accounts.nameyear

group by assignedto,year, givings

order by assignedto,year;

Q2.

Select donlevel,year,givings

From accounts.lvlyear

Order by donlevel,year;

Q3.

Select assignedto,year,givings, SUM(givings) over (partition by assignedto) as totperacc,

round(cast(givings/SUM(givings) over (partition by assignedto) as numeric), 2) as perc

From accounts.nameyear

Group by assignedto,year,givings

Order by assignedto,year;

Q4.

Select year,SUM(givings ) as tot

From accounts.donations

Group by year

Order by tot desc;

Q5. select state,country,givings

from accounts.stat

group by state,country,givings

order by givings desc

limit 10;

Q6.

Select assignedto,year,givings, SUM(givings) over (partition by assignedto order by year rows unbounded preceding) as cumtot

From accounts.nameyear

Group by assignedto,year,givings

Order by assignedto,year;

Q7.

Select accountid,year,givings,AVG(givings) over (partition by accountid order by years rows 1 preceding) as mobavg

From accounts.donations

Group by accountid,year,givings

Order by accountid,year;

Q8.

Select donlevel,year,givings, SUM(givings) over (partition by donlevel) as totperacc,

round(cast(givings/SUM(givings) over (partition by donlevel) as numeric), 2) as perc

From accounts.lvlyear

Group by donlevel,year,givings

Order by donlevel,year;

Q9.

Select assignedto,givings, dense\_rank() over (order by givings desc) as ranking

From accounts.nameyear

Where year = 2016

Group by assignedto,givings;