Database project
4/26/19
Dr. Brown

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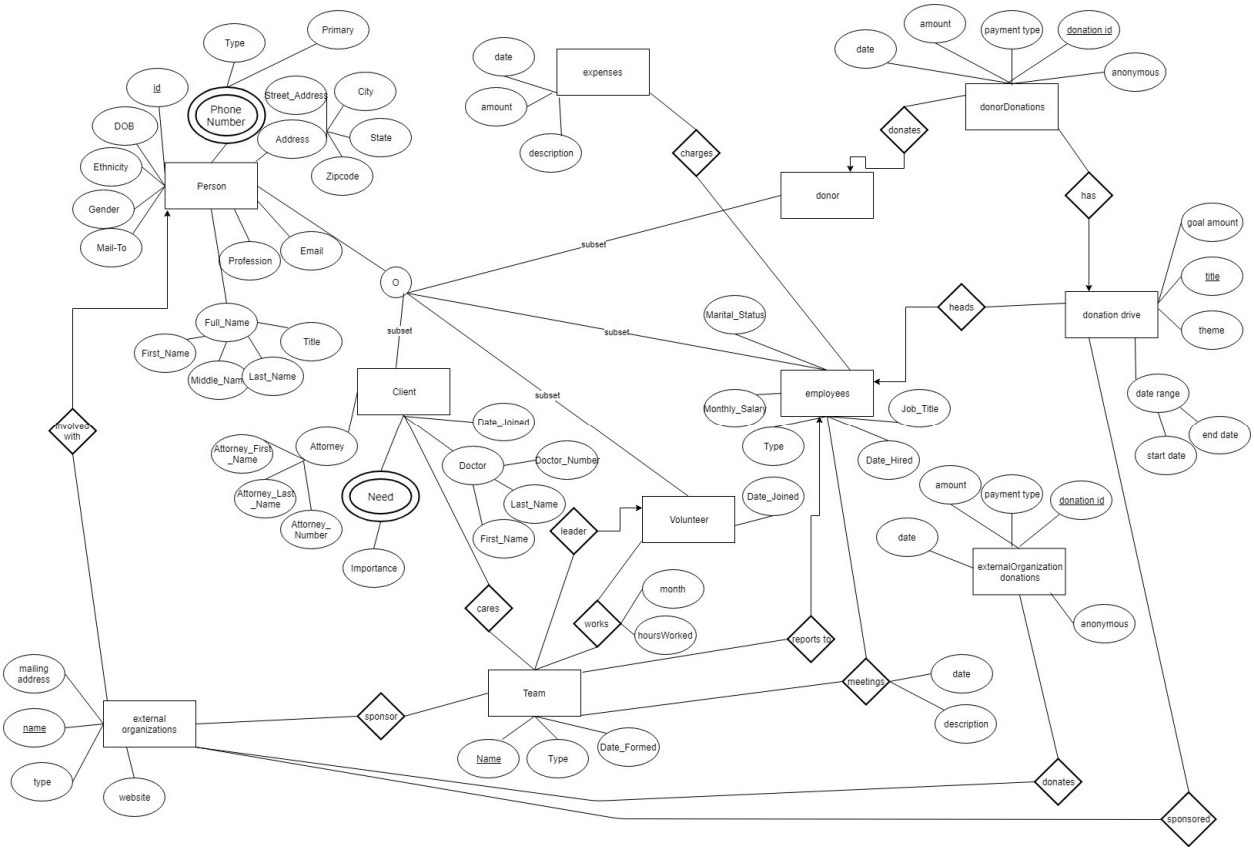
ER-Diagram


Type
Primary
id
Phone Number
Street_Address
City
DOB
Address
State
Ethnicity
Zipcode
Person
Gender
Mail-To
Profession
Email
Full_Name
First_Name
Title
Middle_Nam
Last_Name
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Client
Attorney
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Need
Importance
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cares
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Name
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amount
description
charges
donor
amount
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date
anonymous
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donates
has
goal amount
title
theme
donation drive
heads
Marital_Status
employees
Monthly_Salary
Job_Title
Type
Date_Hired
date range
end date
start date
amount
payment type
donation id
date
externalOrganization donations
anonymous
donates
sponsored

Data Dictionary

```
Person(id NUMBER, First_Name VARCHAR2(30 CHAR), Middle_Name VARCHAR2(30
      CHAR), Last_Name VARCHAR2(30 CHAR), Title VARCHAR2(30 CHAR), DOB
       DATE, Ethnicity VARCHAR2(30 CHAR), Gender CHAR(1), Profession
      VARCHAR2(50 CHAR), Email VARCHAR2(50 CHAR), Street_Address
      VARCHAR2(50 CHAR), City VARCHAR2(30 CHAR), State CHAR(2), Zipcode
      NUMBER(5), Mail_To CHAR(1));
      Constraints for Donor:
            CHECK      (Mail_To IN('Y', 'N')),
            CONSTRAINT Person_pk PRIMARY KEY(id)

Phone_Number( Person_Id NUMBER NOT NULL, Phone_Number NUMBER NOT NULL,
      Primary CHAR(1), Type VARCHAR2(10 CHAR));
      Constraints for Phone_Number:
            CHECK       (Primary IN('Y', 'N')),
            FOREIGN KEY(Person_Id) REFERENCES Person(id),
            CONSTRAINT Phone_Number_pk PRIMARY KEY(Person_Id,
Phone_Number)

Client( id NUMBER, Person_Id NUMBER UNIQUE, Date_Joined DATE);
      Constraints for Client:
            FOREIGN KEY(Person_Id) REFERENCES Person(id),
            CONSTRAINT Client_pk   PRIMARY KEY(id)

Doctor(Client_Id NUMBER UNIQUE, First_Name VARCHAR2(50 CHAR), Last_Name
      VARCHAR2(50 CHAR), Doctor_Number NUMBER);
      Constraints for Doctor:
            Doctor_Number NUMBER,
            FOREIGN KEY(Client_Id) REFERENCES Client(id)

Attorney(Client_Id NUMBER UNIQUE, Attorney_First_Name VARCHAR2(50 CHAR),
      Attorney_Last_Name  VARCHAR2(50 CHAR), Attorney_Number NUMBER);
      Constraints for Attorney:
            FOREIGN KEY Client_Id REFERENCES Client(id)

Needs(Client_Id NUMBER, Need VARCHAR2(30 CHAR), Importance NUMBER(2));
      Constraints for Needs:
            CONSTRAINT Needs_pk   PRIMARY KEY(Client_Id, Need, Importance)

Volunteer(id NUMBER, Person_Id NUMBER UNIQUE, Date_Joined DATE);
      Constraints for Volunteer:
            FOREIGN KEY(Person_Id)  REFERENCES Person(id),
            CONSTRAINT Volunteer_pk PRIMARY KEY(id)


Employee(id NUMBER, Person_Id NUMBER, Monthly_Salary NUMBER(6,2),
      Marital_Status  CHAR(1), Job_Title VARCHAR2(50 CHAR),  Date_Hired
      DATE, Type VARCHAR2(9 CHAR));
      Constraints for Employee:
```

```
            CHECK (Marital_Status IN('S', 'M', 'D', 'W')),
            CHECK (Type IN('FULL-TIME', 'PART-TIME')),
            FOREIGN KEY(Person_Id) REFERENCES Person(id),
            CONSTRAINT Employee_pk PRIMARY KEY(id)


Team(Name VARCHAR2(30 CHAR), Type VARCHAR2(30 CHAR), Date_Formed DATE,
      Team_Leader NUMBER, Reports_To NUMBER);
      Constraints for Team:
            FOREIGN KEY(Reports_To)  REFERENCES Employee(id),
            FOREIGN KEY(Team_Leader) REFERENCES Volunteer(ID),
            CONSTRAINT Team_pk PRIMARY KEY(Name)


Cares(Client_Id NUMBER, Team_Name VARCHAR2(30 CHAR));
      Constraints for Cares:
            FOREIGN KEY(Client_Id) REFERENCES Client(id),
            FOREIGN KEY(Team_Name) REFERENCES Team(Name),
            CONSTRAINT Cares_pk    PRIMARY KEY(Client_Id, Team_Name)


Works(Volunteer_Id NUMBER, Team_Name VARCHAR2(30 CHAR), Month CHAR(3),
      Hours NUMBER);
      Constraints for Works:
            CHECK(MONTH IN('JAN', 'FEB', 'MAR', 'APR', 'MAY', 'JUN',
            'JUL', 'AUG', 'SEP', 'OCT', 'NOV', 'DEC')),
            CHECK(HOURS >= 0),
            FOREIGN KEY(Volunteer_Id) REFERENCES Volunteer(id),
            FOREIGN KEY(Team_Name)    REFERENCES Team(Name),
            CONSTRAINT Works_pk PRIMARY KEY(Volunteer_Id, Team_Name,
Month)


Expenses(Employee_Id NUMBER, "Date"  DATE, Amount NUMBER(6, 2),
      Description VARCHAR2(100 CHAR));
      Constraints for Expenses:
            CHECK(Amount > 0),
            FOREIGN KEY(Employee_Id) REFERENCES Employee(id),
            CONSTRAINT Expenses_pk PRIMARY KEY(Employee_Id, "Date",
            Amount, Description)


Donation_Drive(Title VARCHAR2(50 CHAR), Employee_Id NUMBER, Start_Date
      DATE, End_Date DATE, Goal NUMBER(7, 2), Theme VARCHAR2(30 CHAR));
      Constraints for Donation_Drive:
            CHECK(Goal >=0),
            FOREIGN KEY(Employee_Id) REFERENCES Employee(id),
            CONSTRAINT Donation_Drive_pk PRIMARY KEY(Title)
```

```
Donor(id NUMBER,Person_Id NUMBER);
      Constraints for Donor:
            FOREIGN KEY(Person_Id) REFERENCES Person(id),
            CONSTRAINT Donor_pk    PRIMARY KEY(id)


Donor_Donations(id NUMBER, Donor_id NUMBER, Amount NUMBER(6, 2), Type
      VARCHAR2(10 CHAR), Donation_Drive_Title VARCHAR2(50 CHAR), "Date"
      DATE, Anonymous CHAR(1));
      Constraints for Donor_Donations:
            CHECK(Amount > 0),
            CHECK(Anonymous IN('Y', 'N')),
            FOREIGN KEY(Donation_Drive_Title) REFERENCES
            Donation_Drive(Title),
            FOREIGN KEY(Donor_id) REFERENCES Donor(id),
            CONSTRAINT Donor_Donations_pk PRIMARY KEY(id)


Organization(Name VARCHAR2(50 CHAR), Person_Id NUMBER, Type
      VARCHAR2(50 CHAR), Mailing_Address VARCHAR2(75 CHAR), Website
      VARCHAR2(40 CHAR));
      Constraints for Organization:
            FOREIGN KEY(Person_Id) REFERENCES Person(id),
            CONSTRAINT Organization_pk PRIMARY KEY(Name)


Team_Sponsor(Org_Name VARCHAR2(50 CHAR), Team_Name VARCHAR2(30 CHAR));
      Constraints for Team_Sponsor:
            FOREIGN KEY(Org_Name) REFERENCES Organization(Name),
            FOREIGN KEY(Team_Name) REFERENCES Team(Name),
            CONSTRAINT Team_Sponsor_pk  PRIMARY KEY(Org_Name, Team_Name)


Org_Donations(id NUMBER, Org_Name VARCHAR2(50 CHAR), Amount NUMBER(6, 2),
      Type VARCHAR2(10 CHAR), "Date" DATE, Anonymous CHAR(1));
      Constraints for Org_Donations:
            CHECK(Amount > 0),
            CHECK(Anonymous IN('Y', 'N')),
            FOREIGN KEY(Org_Name)       REFERENCES Organization(Name),
            CONSTRAINT Org_Donations_pk PRIMARY KEY(id)


Donation_Drive_Sponsor(Title VARCHAR2(50 CHAR), Name VARCHAR2(50 CHAR));
      Constraints for Donation_Drive_Sponsor:
            FOREIGN KEY(Title) REFERENCES Donation_Drive(Title),
            FOREIGN KEY(Name) REFERENCES Organization(Name),
            CONSTRAINT  Donation_Drive_Sponsor PRIMARY KEY(Title, Name)
```

```
Meetings(Employee_Id NUMBER, "Date"  DATE, Team_Name varchar2(50 char),
      Description VARCHAR2(100 CHAR));
      Constraints for Meetings:
            FOREIGN KEY(Employee_Id) REFERENCES Employee(id),
            FOREIGN KEY(Team_Name) References team(name),
            CONSTRAINT meetings_pk PRIMARY KEY(Employee_Id, "Date",
            Description)
```

SQL Statements for creating tables

```
CREATE TABLE Person(
    id              NUMBER,
    First_Name      VARCHAR2(30 CHAR),
```

```
    Middle_Name    VARCHAR2(30 CHAR),
    Last_Name      VARCHAR2(30 CHAR),
    Title          VARCHAR2(30 CHAR),
    DOB            DATE,
    Ethnicity      VARCHAR2(30 CHAR),
    Gender         CHAR(1),
    Profession     VARCHAR2(50 CHAR),
    Email          VARCHAR2(50 CHAR),
    Street_Address VARCHAR2(50 CHAR),
    City           VARCHAR2(30 CHAR),
    State          CHAR(2),
    Zipcode        NUMBER(5),
    Mail_To        CHAR(1),    ---Y/N---
    CHECK      (Mail_To IN('Y', 'N')),
    CONSTRAINT Person_pk PRIMARY KEY(id)
);

CREATE TABLE Phone_Number(
    Person_Id    NUMBER NOT NULL,
    Phone_Number NUMBER NOT NULL,
    Primary      CHAR(1),   ---Y/N---
    Type         VARCHAR2(10 CHAR),
    CHECK       (Primary IN('Y', 'N')),
    FOREIGN KEY(Person_Id) REFERENCES Person(id) on delete cascade,
    CONSTRAINT Phone_Number_pk PRIMARY KEY(Person_Id, Phone_Number)
);

CREATE TABLE Client(
    id                  NUMBER,
    Person_Id           NUMBER UNIQUE,
    Date_Joined         DATE,
    FOREIGN KEY(Person_Id) REFERENCES Person(id) on delete cascade,
    CONSTRAINT Client_pk   PRIMARY KEY(id)
);

CREATE TABLE Doctor(
    Client_Id     NUMBER UNIQUE,
    First_Name    VARCHAR2(50 CHAR),
    Last_Name     VARCHAR2(50 CHAR),
    Doctor_Number NUMBER,
    FOREIGN KEY(Client_Id) REFERENCES Client(id)  on delete cascade
);

CREATE TABLE Attorney(
    Client_Id     NUMBER UNIQUE,
    Attorney_First_Name VARCHAR2(50 CHAR),
    Attorney_Last_Name  VARCHAR2(50 CHAR),
```

```
    Attorney_Number     NUMBER,
    FOREIGN KEY(Client_Id) REFERENCES Client(id) on delete cascade
);

CREATE TABLE Needs(
    Client_Id   NUMBER,
    Need        VARCHAR2(30 CHAR),
    Importance  NUMBER(2),
    CHECK(Importance BETWEEN 1 AND 10),
    FOREIGN KEY(Client_Id) REFERENCES Client(id) on delete cascade,
    CONSTRAINT Needs_pk   PRIMARY KEY(Client_Id, Need, Importance)
);

CREATE TABLE Volunteer(
    id              NUMBER,
    Person_Id       NUMBER UNIQUE,
    Date_Joined     DATE,
    FOREIGN KEY(Person_Id)  REFERENCES Person(id) on delete cascade,
    CONSTRAINT Volunteer_pk PRIMARY KEY(id)
);

CREATE TABLE Employee(
    id NUMBER,
    Person_Id       NUMBER,
    Monthly_Salary  NUMBER(6,2),
    Marital_Status  CHAR(1),  ---S, M, D, W
    Job_Title       VARCHAR2(50 CHAR),
    Date_Hired      DATE,
    Type            VARCHAR2(9 CHAR), ---FULL-TIME/PART-TIME
    CHECK (Marital_Status IN('S', 'M', 'D', 'W')),
    CHECK (Type IN('FULL-TIME', 'PART-TIME')),
    FOREIGN KEY(Person_Id) REFERENCES Person(id) on delete cascade,
    CONSTRAINT Employee_pk PRIMARY KEY(id)
);

CREATE TABLE Team(
    Name            VARCHAR2(30 CHAR),
    Type            VARCHAR2(30 CHAR),
    Date_Formed     DATE,
    Team_Leader     NUMBER,
    Reports_To      NUMBER,     ---EMPLOYEE ID
    FOREIGN KEY(Reports_To)  REFERENCES Employee(id) on delete cascade,
    FOREIGN KEY(Team_Leader) REFERENCES Volunteer(ID) on delete cascade,
    CONSTRAINT Team_pk PRIMARY KEY(Name)
);

CREATE TABLE Cares(
```

```
    Client_Id    NUMBER,
    Team_Name   VARCHAR2(30 CHAR),
    FOREIGN KEY(Client_Id) REFERENCES Client(id) on delete cascade,
    FOREIGN KEY(Team_Name) REFERENCES Team(Name) on delete cascade,
    CONSTRAINT Cares_pk    PRIMARY KEY(Client_Id, Team_Name)
);

CREATE TABLE Works(
    Volunteer_Id    NUMBER,
    Team_Name       VARCHAR2(30 CHAR),
    Month           CHAR(3),
    Hours           NUMBER,
    CHECK(MONTH IN('JAN', 'FEB', 'MAR', 'APR', 'MAY', 'JUN', 'JUL', 'AUG',
      'SEP', 'OCT', 'NOV', 'DEC')),
    CHECK(HOURS >= 0),
    FOREIGN KEY(Volunteer_Id) REFERENCES Volunteer(id) on delete cascade,
    FOREIGN KEY(Team_Name)    REFERENCES Team(Name) on delete cascade,
    CONSTRAINT Works_pk PRIMARY KEY(Volunteer_Id, Team_Name, Month)
);

CREATE TABLE Expenses(
    Employee_Id NUMBER,
    "Date"  DATE,
    Amount  NUMBER(6, 2),
    Description VARCHAR2(100 CHAR),
    CHECK(Amount > 0),
    FOREIGN KEY(Employee_Id) REFERENCES Employee(id) on delete cascade,
    CONSTRAINT Expenses_pk PRIMARY KEY(Employee_Id, "Date", Amount,
Description)
);

CREATE TABLE Donation_Drive(
    Title       VARCHAR2(50 CHAR),
    Employee_Id NUMBER,
    Start_Date  DATE,
    End_Date    DATE,
    Goal        NUMBER(7, 2),
    Theme       VARCHAR2(30 CHAR),
    CHECK(Goal >=0),
    FOREIGN KEY(Employee_Id)     REFERENCES Employee(id) on delete
cascade,
    CONSTRAINT Donation_Drive_pk PRIMARY KEY(Title)
);

CREATE TABLE Donor(
    id        NUMBER,
    Person_Id NUMBER,
```

```
    FOREIGN KEY(Person_Id) REFERENCES Person(id) on delete cascade,
    CONSTRAINT Donor_pk    PRIMARY KEY(id)
);

CREATE TABLE Donor_Donations(
    id                    NUMBER,
    Donor_id              NUMBER,
    Amount                NUMBER(6, 2),
    Type                  VARCHAR2(10 CHAR),
    Donation_Drive_Title  VARCHAR2(50 CHAR),
    "Date"                DATE,
    Anonymous             CHAR(1), ---Y/N
    CHECK(Amount > 0),
    CHECK(Anonymous IN('Y', 'N')),
    FOREIGN KEY(Donation_Drive_Title) REFERENCES Donation_Drive(Title) on
delete cascade,
    FOREIGN KEY(Donor_id) REFERENCES Donor(id) on delete cascade,
    CONSTRAINT Donor_Donations_pk PRIMARY KEY(id)
);

CREATE TABLE Organization(
    Name            VARCHAR2(50 CHAR),
    Person_Id       NUMBER,
    Type            VARCHAR2(50 CHAR),
    Mailing_Address VARCHAR2(75 CHAR),
    Website         VARCHAR2(40 CHAR),
    FOREIGN KEY(Person_Id) REFERENCES Person(id) on delete cascade,
    CONSTRAINT Organization_pk PRIMARY KEY(Name)
);

CREATE TABLE Team_Sponsor(
    Org_Name  VARCHAR2(50 CHAR),
    Team_Name VARCHAR2(30 CHAR),
    FOREIGN KEY(Org_Name)  REFERENCES Organization(Name) on delete
cascade,
    FOREIGN KEY(Team_Name) REFERENCES Team(Name) on delete cascade,
    CONSTRAINT Team_Sponsor_pk  PRIMARY KEY(Org_Name, Team_Name)
);

CREATE TABLE Org_Donations(
  id        NUMBER,
  Org_Name  VARCHAR2(50 CHAR),
  Amount    NUMBER(6, 2),
  Type      VARCHAR2(10 CHAR),
  "Date"    DATE,
  Anonymous CHAR(1), ---Y/N
  CHECK(Amount > 0),
```

```
  CHECK(Anonymous IN('Y', 'N')),
  FOREIGN KEY(Org_Name)       REFERENCES Organization(Name) on delete
cascade,
  CONSTRAINT Org_Donations_pk PRIMARY KEY(id)
);

CREATE TABLE Donation_Drive_Sponsor(
    Title VARCHAR2(50 CHAR),
    Name  VARCHAR2(50 CHAR),
    FOREIGN KEY(Title)      REFERENCES Donation_Drive(Title) on delete
cascade,
    FOREIGN KEY(Name)       REFERENCES Organization(Name) on delete
cascade,
    CONSTRAINT  Donation_Drive_Sponsor PRIMARY KEY(Title, Name)
);

CREATE TABLE Meetings(
    Employee_Id NUMBER,
    "Date"  DATE,
    Team_Name varchar2(50 char),
    Description VARCHAR2(100 CHAR),
    FOREIGN KEY(Employee_Id) REFERENCES Employee(id) on delete cascade,
    FOREIGN KEY(Team_Name) References team(name) on delete cascade,
    CONSTRAINT meetings_pk PRIMARY KEY(Employee_Id, "Date", Description)
);
```

SQL Statements for removing tables

```
DROP TABLE MEETINGS CASCADE CONSTRAINTS;
DROP TABLE Donation_Drive_Sponsor CASCADE CONSTRAINTS;
DROP TABLE Org_Donations CASCADE CONSTRAINTS;
DROP TABLE Team_Sponsor CASCADE CONSTRAINTS;
DROP TABLE Organization CASCADE CONSTRAINTS;
DROP TABLE Donor_Donations CASCADE CONSTRAINTS;
DROP TABLE Donor CASCADE CONSTRAINTS;
DROP TABLE Donation_Drive CASCADE CONSTRAINTS;
DROP TABLE Expenses CASCADE CONSTRAINTS;
DROP TABLE Works CASCADE CONSTRAINTS;
DROP TABLE Cares CASCADE CONSTRAINTS;
DROP TABLE Team CASCADE CONSTRAINTS;
DROP TABLE Employee CASCADE CONSTRAINTS;
DROP TABLE Volunteer CASCADE CONSTRAINTS;
```

```
DROP TABLE Needs CASCADE CONSTRAINTS;
DROP TABLE Attorney CASCADE CONSTRAINTS;
DROP TABLE Doctor CASCADE CONSTRAINTS;
DROP TABLE Client CASCADE CONSTRAINTS;
DROP TABLE Phone_Number CASCADE CONSTRAINTS;
DROP TABLE Person CASCADE CONSTRAINTS;
```

SQL Statements for populating tables

```
insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(1, 'Blake', 'Ellis', 'Richey', 'Mr', TO_DATE('03/04/1996',
'MM/DD/YYYY'),
 'White', 'M', 'Software Developer', 'blake.e.richey@gmail.com',
 '1504 E Lantrip St', 'Kilgore', 'TX', 75662, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(2, 'James', NULL, 'Kwon', 'Mr', TO_DATE('05/31/1995',
'MM/DD/YYYY'),
  'Asian', 'M', 'Biomedical Engineer Student', 'james.kwon@gmail.com',
  '123 Austin St', 'Austin', 'TX', 78708, 'N');
```

```
insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(3, 'Kaya', 'Firefly', 'Click', 'Mr', TO_DATE('12/31/1995',
'MM/DD/YYYY'),
 'White', 'M', 'Software Developer', 'kaya.click@gmail.com', '1504
Lantrip',
 'Kilgore', 'TX', 75662, 'N');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(4, 'Tyler', 'Test', 'Andrews', 'Mr', TO_DATE('10/05/1994',
'MM/DD/YYYY'),
 'White', 'M', 'Manifold Fabrication Specialist',
'tyler.andrews@gmail.com',
 '1504 Lantrip', 'Kilgore', 'TX', 75662, 'N');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(5, 'Alpha', 'Beta', 'Delta', 'Miss', TO_DATE('01/02/1994',
'MM/DD/YYYY'),
 'White', 'F', 'Zookeeper', 'abcs@hotmail.com', '165 Prewitt Rd',
'Hallsville',
 'TX', 75650, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(6, 'Leonard', 'Lockheart', 'Brown', 'Dr',
  TO_DATE('06/12/1975', 'MM/DD/YYYY'), 'African American', 'M',
  'Computer Science Professor', 'lbrown@uttyler.edu', '3000 University
Blvd',
  'Tyler', 'TX', 75701, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(7, 'Geralt', 'Witcher', 'Rivia', 'Mr',
  TO_DATE('08/04/1909', 'MM/DD/YYYY'), 'White', 'M', 'Witcher',
```

```
  'cdprojectred@gamers.net', '300 W Rivia', 'Poland', 'TX', 77710, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(8, 'Walluam', 'Esper', 'Bard', 'Mr', TO_DATE('03/20/2019',
'MM/DD/YYYY'),
 'White', 'M', 'Musician', 'deseuler@yahoo.com', '230 Cotton St',
'Longview',
 'TX', 75601, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(9, 'Atleetaleetalee', NULL, NULL, 'Mr',
  TO_DATE('05/21/2018', 'MM/DD/YYYY'), 'Blue', 'M', 'Military General',
  'deseuler@gmail.com', '9 Tulas Ave', 'Aklar', 'TX', 79835, 'Y');

insert INTO Person(id, First_Name, Middle_Name, Last_Name, Title, DOB,
Ethnicity,
  Gender, Profession, Email, Street_Address, City, State, Zipcode,
Mail_To)
VALUES(10, 'Reginald', 'Archibald', 'Qralorae', 'Mr',
  TO_DATE('06/09/2017', 'MM/DD/YYYY'), 'White', 'M', 'Historian',
  'blake.e.richey@gmail.com', '777 Nihon Court', 'Norwegistania', 'TX',
75000,
  'Y');

----------INSERT INTO PHONE NUMBER----------

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES          (1, 9033538260, 'Y', 'Cell');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES          (1, 9033536496, 'N', 'Cell');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES          (2, 5128797342, 'Y', 'Cell');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES          (3, 9032522207, 'Y', 'Cell');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES          (4, 9034318514, 'Y', 'Cell');
```

```
insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES           (4, 9033538260, 'N', 'Cell');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES           (5, 1112223333, 'Y', 'Home');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES           (6, 9035715703, 'Y', 'Business');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES           (8, 9035551234, 'Y', 'Home');

insert INTO Phone_Number(Person_Id, Phone_Number, Primary, Type)
VALUES           (10, 9035557777, 'Y', 'Cell');


----------INSERT INTO CLIENT----------

insert INTO Client(id, Person_Id, Date_Joined) VALUES(1,  1,
TO_DATE('01/01/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(2,  2,
TO_DATE('02/06/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(3,  4,
TO_DATE('03/09/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(4,  6,
TO_DATE('04/19/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(5,  8,
TO_DATE('05/23/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(6,  10,
TO_DATE('06/12/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(7,  3,
TO_DATE('07/17/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(8,  5,
TO_DATE('08/10/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(9,  7,
TO_DATE('09/03/2018', 'MM/DD/YYYY'));
insert INTO Client(id, Person_Id, Date_Joined) VALUES(10, 9,
TO_DATE('09/30/2018', 'MM/DD/YYYY'));


----------INSERT INTO DOCTOR----------

insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (1,  'Matt',   'Hipke',    9033337898);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (2,  'Aaron',  'Smith',    4137585685);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
```

```
VALUES     (3,  'Abdul',  'Johnson',  8318200627);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (4,  'Abe',    'Williams', 5225692491);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (5,  'Alex',   'Jones',    3043153218);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (6,  'John',   'Brown',    6494678524);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (7,  'James',  'Davis',    3954291377);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (8,  'Brent',  'Miller',   9056628259);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (9,  'Lloyd',  'Wilson',   2757367132);
insert INTO Doctor(Client_Id, First_Name, Last_Name, Doctor_Number)
VALUES     (10, 'Amanda', 'Robinson', 9572180473);


----------INSERT INTO ATTORNEY----------

insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (1,  'Patrick',  'Chan',       8354992912);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (2,  'Oswaldo',  'Villa',      9648542765);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (3,  'Patricia', 'Avila',      3486902027);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (4,  'Paris',    'Fernandez',  5273444119);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (5,  'Scott',    'Strickland', 3552067122);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (6,  'Seth',     'Velez',      6666432755);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (7,  'Trey',     'Sellers',    7845123652);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (8,  'Wayne',    'Herman',     3642897099);
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (9,  'Emily',    'Warner',     2244391860);
```

```
insert INTO Attorney(Client_Id, Attorney_First_Name, Attorney_Last_Name,
Attorney_Number)
VALUES       (10, 'Susan',    'Anthony',    9549279451);

----------INSERT INTO NEEDS----------

insert INTO Needs(Client_Id, Need, Importance) VALUES(1,  'Housekeeping',
6);
insert INTO Needs(Client_Id, Need, Importance) VALUES(1,
'Transportation',  1);
insert INTO Needs(Client_Id, Need, Importance) VALUES(2,  'Shopping',
6);
insert INTO Needs(Client_Id, Need, Importance) VALUES(2,  'Cooking',
4);
insert INTO Needs(Client_Id, Need, Importance) VALUES(3,  'Shopping',
7);
insert INTO Needs(Client_Id, Need, Importance) VALUES(5,  'Yard Work',
8);
insert INTO Needs(Client_Id, Need, Importance) VALUES(6,  'Housekeeping',
2);
insert INTO Needs(Client_Id, Need, Importance) VALUES(7,  'Yard Work',
3);
insert INTO Needs(Client_Id, Need, Importance) VALUES(9,
'Transportation', 10);
insert INTO Needs(Client_Id, Need, Importance) VALUES(10, 'Shopping',
5);


----------INSERT INTO VOLUNTEER----------

insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (1,  1,  TO_DATE('04/19/2019', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (2,  10, TO_DATE('01/02/2003', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (3,  9,  TO_DATE('10/13/2001', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (4,  2,  TO_DATE('06/07/2011', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (5,  8,  TO_DATE('07/23/2006', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (6,  3,  TO_DATE('03/14/2009', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (7,  7,  TO_DATE('01/17/2007', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES       (8,  4,  TO_DATE('09/12/2016', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
```

```
VALUES        (9,  6,  TO_DATE('08/29/2017', 'MM/DD/YYYY'));
insert INTO Volunteer(id, Person_Id, Date_Joined)
VALUES        (10, 5,  TO_DATE('11/30/2018', 'MM/DD/YYYY'));


----------INSERT INTO EMPLOYEE----------

INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (1,  1,  1200.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  1),
  TO_DATE('01/02/2018', 'MM/DD/YYYY'), 'PART-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (2,  2,   300.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  2),
  TO_DATE('05/09/2017', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (3,  3,  3000.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  3),
  TO_DATE('08/06/2015', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (4,  4,  2000.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  4),
  TO_DATE('09/23/2013', 'MM/DD/YYYY'), 'PART-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (5,  5,  1100.00, 'W', (SELECT Profession FROM Person WHERE
Person.id =  5),
  TO_DATE('02/21/2008', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (6,  6,  2500.00, 'M', (SELECT Profession FROM Person WHERE
Person.id =  6),
  TO_DATE('06/19/2009', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (7,  7,  1000.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  7),
  TO_DATE('11/14/2009', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (8,  8,   900.00, 'D', (SELECT Profession FROM Person WHERE
Person.id =  8),
  TO_DATE('12/11/2008', 'MM/DD/YYYY'), 'PART-TIME');
```

```
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (9,  9,  4000.00, 'S', (SELECT Profession FROM Person WHERE
Person.id =  9),
  TO_DATE('07/30/2011', 'MM/DD/YYYY'), 'FULL-TIME');
INSERT INTO Employee(id, Person_Id, Monthly_Salary, Marital_Status,
Job_Title, Date_Hired, Type)
VALUES       (10, 10, 1900.00, 'M', (SELECT Profession FROM Person WHERE
Person.id = 10),
  TO_DATE('02/08/2010', 'MM/DD/YYYY'), 'PART-TIME');

----------INSERT INTO TEAM----------

INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('ICPC',                  'Extracurricular',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  3,    5);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('IEEE Robotics',         'Extracurricular',
  TO_DATE('01/01/2019', 'MM/DD/YYYY'),  1,    2);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('DND',                   'Fun and Games',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  4,    1);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('ATMAE',                 'Organizational',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  2,    3);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('SHRM',                  'Networking',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  5,    6);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('Painters Club',         'Civil Service',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  6,    4);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('Trinity Givers',        'Religious',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  9,    9);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('UIL',                   'Extracurricular',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  7,    8);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('Speling tha rite way', 'Competitive',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'), 10,    7);
INSERT INTO Team(Name, Type, Date_Formed, Team_Leader, Reports_To)
VALUES   ('Cant Touch This',       'Dance',
  TO_DATE('04/20/2010', 'MM/DD/YYYY'),  8,   10);


----------INSERT INTO CARES----------
```

```
insert INTO Cares(Client_Id, Team_Name) VALUES(1, 'DND'                );
insert INTO Cares(Client_Id, Team_Name) VALUES(2, 'Painters Club'       );
insert INTO Cares(Client_Id, Team_Name) VALUES(3, 'SHRM'                );
insert INTO Cares(Client_Id, Team_Name) VALUES(4, 'Trinity Givers'      );
insert INTO Cares(Client_Id, Team_Name) VALUES(5, 'Trinity Givers'      );
insert INTO Cares(Client_Id, Team_Name) VALUES(6, 'ICPC'                );
insert INTO Cares(Client_Id, Team_Name) VALUES(7, 'Cant Touch This'     );
insert INTO Cares(Client_Id, Team_Name) VALUES(8, 'Trinity Givers'      );
insert INTO Cares(Client_Id, Team_Name) VALUES(9, 'Speling tha rite way');
insert INTO Cares(Client_Id, Team_Name) VALUES(10, 'ATMAE'               );

----------INSERT INTO WORKS----------

insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES(10,
'DND'                 , 'JAN', 30);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 9,
'Painters Club'       , 'MAR', 15);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 8,
'SHRM'                , 'JUN', 20);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 7,
'Trinity Givers'      , 'MAR', 44);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 6,
'Trinity Givers'      , 'JUL', 19);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 5,
'ICPC'                , 'MAR', 32);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 4, 'Cant
Touch This'     , 'DEC', 36);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 3,
'Trinity Givers'      , 'JAN', 19);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 2,
'Speling tha rite way', 'MAR', 18);
insert INTO Works(Volunteer_Id, Team_Name, Month, Hours) VALUES( 1,
'ATMAE'               , 'OCT', 29);

---------INSERT INTO DONOR ----------
INSERT INTO DONOR(id,Person_Id) values(1,1);
INSERT INTO DONOR(id,Person_Id) values(2,3);
INSERT INTO DONOR(id,Person_Id) values(3,5);
INSERT INTO DONOR(id,Person_Id) values(4,5);
INSERT INTO DONOR(id,Person_Id) values(5,7);
INSERT INTO DONOR(id,Person_Id) values(6,9);
INSERT INTO DONOR(id,Person_Id) values(7,10);
INSERT INTO DONOR(id,Person_Id) values(8,5);
INSERT INTO DONOR(id,Person_Id) values(9,9);
INSERT INTO DONOR(id,Person_Id) values(10,3);

-------insert into donation_drive------------
```

```
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive1',1,TO_DATE('03/25/2010','MM/DD/YYYY'),TO_DATE('03/
26/2010','MM-DD-YYYY'),1000,'star wars');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive2',2,TO_DATE('04/15/2017','MM/DD/YYYY'),TO_DATE('04/
16/2017','MM/DD/YYYY'),500,'lord of the rings');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive3',3,TO_DATE('03/28/2018','MM/DD/YYYY'),TO_DATE('04/
01/2018','MM/DD/YYYY'),1500,'harry potter');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive4',3,TO_DATE('08/21/2016','MM/DD/YYYY'),TO_DATE('08/
22/2016','MM/DD/YYYY'),100,'sql party');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive5',1,TO_DATE('07/11/2014','MM/DD/YYYY'),TO_DATE('07/
12/2014','MM/DD/YYYY'),6000,'do my laundry drive');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive6',6,TO_DATE('11/12/2013','MM/DD/YYYY'),TO_DATE('11/
13/2013','MM/DD/YYYY'),5000,'military');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive7',8,TO_DATE('03/25/2012','MM/DD/YYYY'),TO_DATE('03/
26/2012','MM/DD/YYYY'),8000,'warcraft');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive8',1,TO_DATE('09/14/2019','MM/DD/YYYY'),TO_DATE('09/
15/2019','MM/DD/YYYY'),4000,'starcraft');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive9',9,TO_DATE('06/09/2018','MM/DD/YYYY'),TO_DATE('06/
10/2018','MM/DD/YYYY'),10000,'fortnite');
insert into
donation_drive(title,employee_id,start_date,end_date,goal,theme)
values('donation_drive10',10,TO_DATE('12/20/2020','MM/DD/YYYY'),TO_DATE('1
2/21/2020','MM/DD/YYYY'),9000,'summer');

-------- insert into donor_donations

insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(1,1,500,'check',null,TO_DATE('03/25/2010','MM-DD-YYYY'),'Y');
```

```
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(2,1,100,'credit','donation_drive1',TO_DATE('10/19/2016','MM-
DD-YYYY'),'Y');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(3,2,600,'debit',null,TO_DATE('03/25/2010','MM-DD-YYYY'),'N');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(4,5,900,'cash','donation_drive2',TO_DATE('08/21/2014','MM-DD-
YYYY'),'Y');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(5,7,5,'credit',null,TO_DATE('09/25/2010','MM-DD-YYYY'),'N');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(6,6,22,'check','donation_drive3',TO_DATE('08/22/1988','MM-DD-
YYYY'),'N');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(7,4,300,'debit',null,TO_DATE('2/23/2002','MM-DD-YYYY'),'N');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(8,10,150,'credit','donation_drive4',TO_DATE('07/12/2015','MM-
DD-YYYY'),'Y');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(9,6,777,'cash',null,TO_DATE('06/14/2019','MM-DD-YYYY'),'N');
insert into
donor_donations(id,donor_id,amount,type,donation_drive_title,"Date",Anonym
ous) values(10,8,666,'cash','donation_drive5',TO_DATE('08/10/1699','MM-DD-
YYYY'),'Y');


------- insert into organization ------------------

insert into organization(name,person_id,type,mailing_address,website)
values('organization1',1,'for-profit','123 drive
way','wwww.organization.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization2',2,'for-profit','456 park
place','wwww.organization2.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization3',3,'for-profit','789 drive
drive','wwww.organization3.com');
```

```
insert into organization(name,person_id,type,mailing_address,website)
values('organization4',4,'non-profit','555 university
way','wwww.organization4.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization5',5,'non-profit','123
roundaboutway','wwww.organization5.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization6',6,'non-profit','666 depths
below','wwww.organization6.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization7',7,'non-profit','123
fourfivesix','wwww.organization7.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization8',8,'non-profit','999 altered
six','wwww.organization8.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization9',9,'for-profit','558 south park
blvd','wwww.organization9.com');
insert into organization(name,person_id,type,mailing_address,website)
values('organization10',10,'non-profit','301 north park
blvd','wwww.organization10.com');


--- insert into organization donations ----

insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(1,'organization1',500,'debit',TO_DATE('08/21/2018','MM-DD-
YYYY'),'Y');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(2,'organization2',5000,'credit',TO_DATE('09/22/2020','MM-DD-
YYYY'),'N');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(3,'organization3',880,'debit',TO_DATE('10/01/2014','MM-DD-
YYYY'),'N');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(4,'organization3',9000,'credit',TO_DATE('11/15/2006','MM-DD-
YYYY'),'N');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(5,'organization5',450,'check',TO_DATE('06/13/2008','MM-DD-
YYYY'),'N');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(6,'organization9',666,'check',TO_DATE('07/14/2015','MM-DD-
YYYY'),'Y');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(7,'organization10',123,'check',TO_DATE('09/06/2014','MM-DD-
YYYY'),'Y');
```

```
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(8,'organization2',999,'debit',TO_DATE('04/11/2017','MM-DD-
YYYY'),'Y');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(9,'organization4',1500,'credit',TO_DATE('06/15/1970','MM-DD-
YYYY'),'Y');
insert into Org_Donations (id,Org_Name,Amount,Type,"Date",Anonymous)
values(10,'organization1',2300,'check',TO_DATE('05/01/2005','MM-DD-
YYYY'),'N');


-- insert into expenses --
insert into expenses(employee_id,"Date",amount,description) values
(1,TO_DATE('06/25/2018','MM-DD-YYYY'),500,'gas for trip');
insert into expenses(employee_id,"Date",amount,description) values
(1,TO_DATE('06/25/2018','MM-DD-YYYY'),100,'warcraft subscription');
insert into expenses(employee_id,"Date",amount,description) values
(2,TO_DATE('06/25/2018','MM-DD-YYYY'),45,'league is 100% free');
insert into expenses(employee_id,"Date",amount,description) values
(5,TO_DATE('06/25/2018','MM-DD-YYYY'),55,'steam sale');
insert into expenses(employee_id,"Date",amount,description) values
(6,TO_DATE('06/25/2018','MM-DD-YYYY'),60,'necessary accessories');
insert into expenses(employee_id,"Date",amount,description) values
(10,TO_DATE('06/25/2018','MM-DD-YYYY'),80,'groceries');
insert into expenses(employee_id,"Date",amount,description) values
(8,TO_DATE('06/25/2018','MM-DD-YYYY'),50,'dinner out');
insert into expenses(employee_id,"Date",amount,description) values
(9,TO_DATE('06/25/2018','MM-DD-YYYY'),60,'necessary vidya game');
insert into expenses(employee_id,"Date",amount,description) values
(4,TO_DATE('06/25/2018','MM-DD-YYYY'),80,'cell phone');
insert into expenses(employee_id,"Date",amount,description) values
(6,TO_DATE('06/25/2018','MM-DD-YYYY'),10,'taco bell');

----insert into donation_drive_sponsor-------
insert into donation_drive_sponsor(title,name)
values('donation_drive1','organization2');
insert into donation_drive_sponsor(title,name)
values('donation_drive10','organization8');
insert into donation_drive_sponsor(title,name)
values('donation_drive4','organization1');
insert into donation_drive_sponsor(title,name)
values('donation_drive4','organization3');
insert into donation_drive_sponsor(title,name)
values('donation_drive5','organization5');
insert into donation_drive_sponsor(title,name)
values('donation_drive3','organization6');
```

```
insert into donation_drive_sponsor(title,name)
values('donation_drive1','organization7');
insert into donation_drive_sponsor(title,name)
values('donation_drive9','organization3');
insert into donation_drive_sponsor(title,name)
values('donation_drive4','organization4');
insert into donation_drive_sponsor(title,name)
values('donation_drive1','organization6');

--insert into meetings---
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(1,TO_DATE('06/20/2018','MM-DD-YYYY'),'Cant Touch This','Very hot at
meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(2,TO_DATE('06/15/2018','MM-DD-YYYY'),'Cant Touch This','Very cold
at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(3,TO_DATE('06/14/2018','MM-DD-YYYY'),'Cant Touch This','Very mild
at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(8,TO_DATE('06/13/2018','MM-DD-YYYY'),'Cant Touch This','Very not-
hot at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(1,TO_DATE('06/10/2018','MM-DD-YYYY'),'Cant Touch This','Very not-
cold at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(5,TO_DATE('06/08/2018','MM-DD-YYYY'),'Cant Touch This','Very not
not-cold at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(9,TO_DATE('06/01/2018','MM-DD-YYYY'),'Cant Touch This','Very not
not-hot at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(10,TO_DATE('05/25/2018','MM-DD-YYYY'),'Cant Touch This','Very not
mild at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(4,TO_DATE('05/10/2018','MM-DD-YYYY'),'Cant Touch This','Very not
not-mild at meeting');
insert into meetings(Employee_id,"Date",Team_Name,Description)
values(6,TO_DATE('05/08/2018','MM-DD-YYYY'),'Cant Touch This','MEETING
COLLAPSED INTO THE VOID');
```

SQL and Relational Algebra Statements

Query1

SQL:

```
select first_name,middle_name,last_name,street_address,city,state,zipcode
from person
where
Mail_To='Y'
order by state,city,last_name,first_name,middle_name;
```

Relational Algebra:

Π first_name,middle_name,last_name,street_address,city,state,zipcode(σ mail_to='Y'(Person))

Query2

SQL:

```
SELECT
    Person.Title          as Title,
    Person.First_Name     as First,
    Person.Middle_Name    as Middle,
    Person.Last_Name      as Last,
    Doctor.First_Name     as DoctorFirstName,
    Doctor.Last_Name      as DoctorLastName,
    Doctor.Doctor_Number as DoctorNumber
FROM CLIENT
INNER JOIN Doctor ON Doctor.Client_Id=Client.id
INNER JOIN Person ON Person.id=Client.Person_Id
ORDER BY Last ASC, First ASC;
```

Relational Algebra:

(Π_Person.Title,
Person.First_Name,
Person.Middle_Name,
Person.Last_Name,
Doctor.First_Name,
Doctor.Last_Name
Doctor.Doctor_Number((Client ⋈ Doctor) ⋈ Person))

Query3

SQL:

```
select person.first_name,volunteer.date_joined
from works,volunteer,team,cares,person
where cares.Client_Id = &clientId and volunteer.Person_id = person.id
 And
 works.volunteer_id=volunteer.id and works.team_name=team.name
 and
 team.name=cares.team_name
 order by volunteer.date_joined;
```

Relational Algebra:

(Πperson.first_name,volunteer.date_joined(**σ** cares.client_id = '&clientId' ∧
volunteer.person_id = person.id **∧** works.volunteer_id = volunteer.id ∧
works.team_name = team.name **∧** team.name = cares.team_name
(works **X** volunteer **X** team **X** cares **X** person))

Query4

SQL:

```
--Clients that are supported by team that reports to highest paid
SELECT
    Person.Title          as Title,
    Person.First_Name     as First,
    Person.Middle_Name    as Middle,
    Person.Last_Name      as Last,
    Person.Street_Address as StreetAddress,
    Person.City,
    Person.State,
    Person.Zipcode
FROM Employee
INNER JOIN Team   ON Team.Reports_To=Employee.id
INNER JOIN Cares  ON Cares.Team_Name=Team.Name
INNER JOIN Client ON Client.id=Cares.Client_Id
INNER JOIN Person ON Person.id=Client.Person_Id
WHERE (Monthly_Salary) IN
( SELECT MAX(Monthly_Salary)
  FROM Employee
)
ORDER BY Last ASC;
```

Relational Algebra:

Π_Person.Title,
Person.First_Name,
Person.Middle_Name,
Person.Last_Name,
Person.Street_Address,
Person.City,
Person.State,
Person.Zipcode(
  σ_Monthly_Salary=G_MAX(Monthly_Salary)(Employee)(
    (((Employee ⋈ Team) ⋈ Cares) ⋈ Client) ⋈ Person
)
)

Query5

SQL:

```
Select
person.first_name,person.last_name,person.street_address,person.city,
person.state,person.zipcode,person.profession,sum(donor_donations.amount)
as sum,donor_donations.anonymous
From
Client,person,donor,donor_donations
Where
client.person_id = person.id
And
donor.person_id=person.id
And
donor_donations.donor_id = donor.id
group by
person.first_name,person.last_name,person.street_address,person.city,person.st
ate,person.zipcode,person.profession,donor_donations.anonymous
 order by sum desc;
```

Relational Algebra:

Πperson.first_name,person.last_name,person.street_address,person.city, person.state,person.zipcode,person.profession,**P**sum(**G**sum(donor_donations.amount)), donor_donations.anonymous(**σ** client.person_id = person.id ∧ donor.person_id = person.id ∧ donor_donations.donor_id = donor.id (client **X** person **X** donor **X** donor_donations)

Query6

SQL:

```
SELECT
    Person.Title              as Title,
    Person.Last_Name          as Last,
    Phone_Number.Phone_Number as "Number",
    Donor_Donations."Date"    as "Date",
    Donor_Donations.Amount
FROM Donor
```

```
INNER JOIN Donor_Donations ON Donor_Donations.Donor_Id=Donor.id
INNER JOIN Person          ON Person.id=Donor.Person_Id
INNER JOIN Phone_Number    ON Phone_Number.Person_Id=Person.id
WHERE (Donor_Donations.Donor_Id, Donor_Donations."Date") IN (
    SELECT Donor_Id, MAX("Date") as "Date"
    FROM Donor_Donations
    GROUP BY Donor_Id
)
AND Donor_Donations.Anonymous = 'Y'
AND Phone_Number.Primary = 'Y'
AND Person.Mail_To = 'N'
ORDER BY Donor_Donations.Amount DESC;
```

Relational Algebra:

Π_Person.Title,
Person.Last_Name,
Phone_Number.Phone_Number,
Donor_Donations.Date,
Donor_Donations.Amount(
  σ_Donor_Donation.Donor_Id, Donor_Donations.Date=
    Π_Donot_Id, MAX(Date)(
      Donor_Id_**G**_MAX(Date)(Donor_Donations)
)
)
  ∧ Donor_Donations.Anonymous='Y'
  ∧ Phone_Number.Primary='Y'
  ∧ Person.Mail_To='N'(
    (((Donor ⋈ Donor_Donations) ⋈ Person) ⋈ Phone_Number)
)
)

Query7

SQL:

```
SELECT
 Person.First_Name  AS "ClientFirstName",
 Person.Middle_Name AS "ClientMiddleName",
 Person.Last_Name   AS "ClientLastName",
 VolunteerPerson.First_Name  AS "VolunteerFirstName",
 VolunteerPerson.Middle_Name AS "VolunteerMiddleName",
 VolunteerPerson.Last_Name   AS "VolunteerLastName",
 Volunteer.Date_Joined,
 Team.Name                   AS "Team Name"
```

```
FROM Client
INNER JOIN Cares ON Client.id=Cares.Client_Id
INNER JOIN Team  ON Team.Name = Cares.Team_Name
INNER JOIN Works ON Works.Team_Name = Team.Name
INNER JOIN Volunteer ON Volunteer.id = Works.Volunteer_Id
INNER JOIN (
 SELECT * FROM Person
) VolunteerPerson ON (VolunteerPerson.id=Volunteer.Person_Id)
INNER JOIN Person ON Person.id = Client.Person_Id
WHERE Person.Gender != VolunteerPerson.Gender
ORDER BY "ClientLastName", "ClientFirstName", "Team Name",
"VolunteerLastName",
 "VolunteerFirstName";
```

Relational Algebra:

Π_Person.First_Name,
Person.Middle_Name,
Person.Last_Name,
VolunteerPerson.First_Name,
VolunteerPerson.Middle_Name,
VolunteerPerson.Last_Name,
Volunteer.Date_Joined,
Team.Name(
 σ_Person.Gender!=VolunteerPerson.Gender(
  (((((Client ⋈ Cares) ⋈ Team) ⋈ Works) ⋈ Volunteer) ⋈ Person as VolunteerPerson)
⋈ Person
)
)

Query8

SQL:

select person.ethnicity,person.gender,count(*) from client,person
where client.person_id = person.id group by person.ethnicity,person.gender
union (select person.gender,person.ethnicity,count(*) from client,person

where client.person_id = person.id group by person.gender,person.ethnicity)
union (select person.ethnicity,person.gender,count(*) from client,person
where client.person_id = person.id group by person.ethnicity,person.gender);

Relational Algebra:

Πperson.ethnicity,person.gender,Gcount(*)(**σ**client.person_id = person.id(client **X** person)**∪ Π**person.gender,person.ethnicity,Gcount(*)(**σ**client.person_id = person.id(client Xperson) **∪ Π**person.ethnicity,person.gender,Gcount(*)(**σ**client.person_id = person.id(client**X** person)

Query9

SQL:

```
select  organization.type,sum(amount),count(Org_donations.id) from
organization,Org_Donations
where organization.name = Org_donations.Org_Name
 group by organization.type;
```

Relational Algebra:

Π organization.type,sum(amount),**G**count(Org_donations.id)(**σ** organization.name = Org_donations.Org_name (organizations **X** Org_Donations)

Query10

SQL:

```
select person.first_name fName,person.last_name lName,phone_number.phone_number
Phone#, extract(year from donor_donations."Date")year
from
donor,donor_donations,person,phone_number
where
phone_number.person_id = person.id and phone_number.primary='Y' and
person.id=donor.person_id and donor.id = donor_donations.donor_id
group by
person.first_name,person.last_name,phone_number.phone_number,donor_donations."Date"
having (sum(donor_donations.amount)
in
        (select sum(donor_donations.amount)
         from
         donor,donor_donations
         where donor.id = donor_donations.donor_id
         group by donor.id));
```

Relational Algebra:

Π**pfName(**person.first_name),**ρlName**(person.last_name),**ρPhone#**(phone_number.phone_number),**ρyear**(donor_donations.”Date”)(σ phone_number.person_id = person.id ∧ phone_number.primary=’Y’ ∧ person.id=donor.person_id ∧ donor.id = donor_donations.donor_id (donor **X** donor_donations **X** person **X** phone_number) ∧ sum(donor_donations.amount) ∩ (**Π** donor.id **G**sum(donor_donations.amount) (**σ** donor.id = donor_donations.donor_id(donor **X** donations))

Query11

SQL:

```
select organization.name,
sum(donor_donations.amount)+sum(Org_donations.amount)
from person,organization,donor,donor_donations,Org_donations where
org_donations.org_name = organization.name and
organization.person_id = person.id and person.id=donor.person_id
and donor_donations.donor_id=donor.id group by organization.name
order by organization.name;
```

Relational Algebra:

Π organization.name,**G**sum(donor_donations.amount),
(**σ** org_donations.org_name = organization.name ∧ organization.person_id = person.id ∧
person.id = donor.person_id ∧ donor_donations.donor_id = donor.id(person **X** organization **X** donor **X** donor_donations **X** Org_donations)

Query12

SQL:

```
SELECT
    Need
FROM Client
INNER JOIN Needs ON Needs.Client_Id=Client.id
WHERE Needs.Importance >= 7
GROUP BY Needs.Need
HAVING Count(Need) >= 2;
```

Relational Algebra:

Π_Need(σ_Count(Need) > 1 ∧ Importance >=7(Need_G_Count(Need)((Client ⋈ Needs))))

Query13

SQL:

```
Select
person.first_name,person.last_name,sum(expenses.amount),
```

employee.monthly_salary
From
person,employee,expenses where employee.person_id = person.id
and expenses.employee_id=employee.id
group by person.first_name,person.last_name,employee.monthly_salary
having sum(expenses.amount) < employee.monthly_salary;

Relational Algebra:

Πperson.first_name,person.last_name,**G**sum(expenses.amount),employee.monthly_salary(**σ** employee.person_id = person.id **∧** expenses.employee_id = employee.id(person **X** employee **X** expenses)

Query14

SQL:

```
SELECT DISTINCT *
FROM (
 SELECT
   Team.Name,
   Team.Type,
   LeaderPerson.First_Name         AS "LeaderFirstName",
   LeaderPerson.Last_Name          AS "LeaderLastName",
   Person.First_Name               AS "ReportToFirstName",
   Person.Last_Name                AS "ReportToLastName",
   CountVolunteers."NumVolunteers" AS "NumVolunteers",
   CountVolunteers."Hours"         AS "SumHours",
   MeetDates."Date"                AS "Date"
 FROM Team
 LEFT OUTER JOIN Works     ON Works.Team_Name=Team.Name
 LEFT OUTER JOIN Volunteer ON Volunteer.id=Works.Volunteer_Id
 LEFT OUTER JOIN (
 SELECT * FROM Person
 ) LeaderPerson ON (LeaderPerson.id=Team.Team_Leader)
 LEFT OUTER JOIN Person ON Person.id=Team.Reports_To
 LEFT OUTER JOIN(
   SELECT
     Team.Name             AS "Name",
     COUNT(Volunteer_Id)   AS "NumVolunteers",
     SUM(Works.Hours)      AS "Hours"
   FROM Team
   INNER JOIN Works ON Works.Team_Name=Team.Name
   GROUP BY Team.Name
```

```
 ) CountVolunteers ON CountVolunteers."Name"=Team.Name
 FULL OUTER JOIN(
   SELECT
     Team_Name,
     MAX("Date") AS "Date"
   FROM Meetings
   GROUP BY Team_Name
 ) MeetDates ON MeetDates.Team_Name=Team.Name
)
ORDER BY Type ASC, Name ASC;
```

Relational Algebra:

Πteam.name,team.type,**ρ**LeaderFirstName(leaderperson.first_name),**ρ**LeaderLastName(leaderperson.last_name),**ρ**ReportToFirstName(person.first_name),**ρ**ReportToLastName(person.last_name),**ρ**NumVolunteers(countvolunteers.”numvolunteers”),**ρ**NumHours(countvolunteers.”hours”),**ρ**Date(meetDates.”Date”)(**σ**((Team ⋈ works) ⋈ volunteer ⋈ (**Π** * (**σ**leaderperson.id = team.team_leader(person))) ⋈ person ⋈ (**Π**Pname(team.name),**P**numVolunteers(count(volunteer.id)),**P**hours(sum(works.hours))(team ⋈ works)) ⋈ (**Π**team_name,**P**”Date”(max(“Date”))(meetings))))

Query15

SQL:

```
Select
donation_drive.title,donation_drive.theme,donation_drive.start_date,
donation_drive.end_date,sum(donor_donations.amount)
From
Donor_donations,donation_drive
where donor_donations.donation_drive_title = donation_drive.title
group by
donation_drive.title,donation_drive.theme,donation_drive.start_date,
Donation_drive.end_date,donation_drive.goal
Having
sum(donor_donations.amount) >= donation_drive.goal;
```

Relational Algebra:

Πdonation_drive.title,donation_drive.theme,donation_drive.start_date,donation_drive.end_date,**G**sum(donor_donations.amount)(**σ**donor_dontions.donation_drive_title=donation_drive.title) ∧ sum(donor_donations.amount) > donation_drive.goal(donor_donations **X** donation_drive)

Query16

SQL:

```
SELECT
 Donation_Drive.Title,
 Donation_Drive.End_Date,
 Person.Last_Name,
 Employee.Job_Title
FROM Donation_Drive
LEFT OUTER JOIN Employee ON Employee.id = Donation_Drive.Employee_Id
LEFT OUTER JOIN Person ON Person.id = Employee.Person_Id
WHERE Donation_Drive.Title IN(
 SELECT
   Donation_Drive.Title
 FROM Donation_Drive
 LEFT OUTER JOIN Donor_Donations ON
Donor_Donations.Donation_Drive_Title=Donation_Drive.Title
 GROUP BY Donation_Drive.Title, Donation_Drive.Goal
 HAVING SUM(NVL(Donor_Donations.Amount, 0)) <= Donation_Drive.Goal
)
ORDER BY Donation_Drive.Goal DESC;
```

Relational Algebra:

Π_Donation_Drive.Title,
Donation_Drive.End_Date,
Person.Last_Name,
Employee.Job_Title(
 σ_Donation_Drive.Title=Π_Donation_Drive.Title(
  Title_G_SUM_Donor_Donations.Amount(Donation_Drive ⋈ Donor_Donations)
)((Donation_Drive ⋈ Employee) ⋈ Person)
)

Query17

SQL:

```
Select
Person.last_name,employee.monthly_salary,employee.marital_status,
count(team.reports_to),count(donation_drive.employee_id)
from person,employee,team,donation_drive
Where
donation_drive.employee_id = employee.id and person.id = employee.person_id
And
```

```
employee.type='PART-TIME' and team.reports_to = employee.id
group by person.last_name,employee.monthly_salary,employee.marital_status
order by person.last_name;
```

Relational Algebra:

Πperson.last_name,employee.monthly_salary,employee.marital_status, **G**count(team.reports_to),count(donation_drive)(**σ** donation_drive.employee_id = Employee.id ∧ person.id = employee.person_id ∧ employee.type='PART-TIME' ∧ Team.reports_to = employee.id(person**X**employee**X**team**X**donation_drive)

Query18

SQL:

```
Select  organization.name,organization.type,organization.website,person.first_name,
person.last_name
From
Org_donations,organization,person
Where
person.id = organization.person_id
And
organization.name = org_donations.org_name
And
org_donations.anonymous='N'
and not exists
(select organization.name from organization,donation_drive_sponsor
where organization.name = donation_drive_sponsor.name)
order by organization.name;
```

Relational Algebra:

ΠOrganization.name,organization.type,organization.website,person.first_name,person.last_name(**σ** person.id = organization.person_id ∧ organization.name = org_donations.org_name ∧ org_donations.anonymous = 'N' (Org_donations **X** organization **X** person) **-** (**Π** organization.name(**σ** organization.name = donation_drive_sponsor.name)(organization **X** donation_drive_sponsor)

Query19

SQL:

```
Select
person.first_name,person.last_name,count(works.team_name),sum(works.hours)
from volunteer,person,works WHERE volunteer.id = works.volunteer_id
and person.id=volunteer.person_id and date_joined between
TO_DATE (add_months(sysdate,-3), 'DD/MM/YY')
AND
TO_DATE (sysdate, 'DD/MM/YY')
group by person.first_name,person.last_name
order by person.last_name,person.first_name;
```

Relational Algebra:

Π person.first_name,person.last_name,**G**count(works.team_name),sum(works.hours)
(**σ** volunteer.id = works.volunteer_id **∧** person.id = volunteer.person_id **∧**
Join_date > (sysdate,-3)(volunteer **X** person **X** works)

Query20

SQL:

```
UPDATE Employee
SET Monthly_Salary = Monthly_Salary*1.1
WHERE Employee.id IN(
 SELECT
   Employee.id
 FROM Team
 INNER JOIN Employee ON Employee.id=Team.Reports_To
 GROUP BY Employee.id
 HAVING COUNT(Team.Name) > 1
)
AND Type='PART-TIME';
```

Relational Algebra:

Employee ← Π_id, Person_Id, Monthly_Salary, Marital_Status, Job_Title, Date_Hired,
Type(
 σ_Employee.id=(Π_Employee.id(Team ⋈ Employee)) ∧
Employee.id_G_COUNT(Team.Name)((Team ⋈ Employee)) > 1(
  Employee
)
)

Query21

SQL:

```
update needs set importance=(importance+1)
where needs.client_id in
(SELECT EMPLOYEE.ID FROM EMPLOYEE,MEETINGS
WHERE EMPLOYEE.ID=MEETINGS.EMPLOYEE_ID
having count(meetings.employee_id) <>
(select min(employee.id) from employee,meetings
where employee.id = meetings.employee_id fetch next 1 rows only)
GROUP BY EMPLOYEE.ID);
```

Relational Algebra:

Needs.importance ← (Needs.importance + 1(**σ** needs.client_id ∩ **(Π** Employee.id(σ employee.id = meetings.employee_id **∧** Count **!=** (**Π G**min(employee.id)(σemployee.id = meetings.employee_id)(employee **X** meetings)))(meetings.employee_id)(employee **X** meetings))

Query22

SQL:

```
UPDATE Org_Donations
SET Amount = Amount*2
WHERE Org_Donations."Date" IN(
 SELECT
   MAX(Org_Donations."Date")
 FROM Org_Donations
);
```

Relational Algebra:

Org_Donations <- Π_id, Org_Name, 2*Amount, Type, "Date", Anonymous(
 σ_"Date"=G_MAX("Date")(Org_Donations)
)(Org_Donations)

Query23

SQL:

```
delete from employee where employee.id in (select id from (
select employee.id,count(meetings.employee_id) as count_meetings
from meetings right outer join employee on
employee.id = meetings.employee_id group by employee.id)x
having min(x.count_meetings) = 0 group by id);
```

Relational Algebra:

Employee ← Employee - (**σ** **G**min(x.count_meetings = 0(**Π** employee.id(employee)) ∩ **P**x(**Π** employee.id,**G**(meetings.employee_id)(**σ** employee.id = meetings.employee_id (meetings ⋈ employee))

Query24

SQL:

```
DELETE FROM Volunteer
WHERE Volunteer.id = (
 SELECT
   Volunteer_Id
 FROM Works
 WHERE Works.Hours IN(
   SELECT
     MIN(Hours)
   FROM Volunteer
   INNER JOIN Works ON Works.Volunteer_Id=Volunteer.id
 )
);
```

Relational Algebra:

Volunteer ← Π_id, Person_Id, Date_Joined(Volunteer)
-
Π_id, Person_Id, Date_Joined(
 σ_Works.Hours = G_MIN(Hours)(Volunteer ⋈ Works)
)

Query25

SQL:

```
delete from donation_drive
where donation_drive.title
not in
        (select donation_drive.title from donation_drive,donor_donations
         where donation_drive.title = donor_donations.donation_drive_title);
```

Relational Algebra:

Donation_drive ← donation_drive - ((**Π** donation_drive.title) ∩
(**Π** donation_drive.title(**σ** donation_drive.title !=
donor_donation_drive_title(donation_drive **X** donor_donations)))