DATABASE MANAGEMENT EXAMPLE

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Paper Summary:

This paper illustrates some different aspects of establishing and utilizing a database for a company. The company's specifications and requirements can be found on the following page. Using the information given, the ER diagram and relational database are created to show how the different variables and tables relate to one another in the database. Then, a data dictionary is displayed to showcase the details and aspects of the individual variables. Lastly, an example of the input and execution of the created queries is shown along with the output and affected tables. The database was created using a SQL server and the user input program was developed using JAVA.

The programs are also contained in the file on .github to showcase the programs themselves.

System Requirements

There are many categories of people that need to be tracked in the PAN database. Each person may fall into more than one of the following categories: clients, volunteers, employees, and donors. PAN tracks the name, social security number, birth date, race, gender, and profession of each person. In addition, PAN stores the contact information for each person consisting of a mailing address, email address, and home, work, and cell phone number. PAN also sends a monthly newsletter to people on its mailing list, so the database should indicate whether or not each person in the database is on that list. Finally, the system should have the ability to store a list of emergency contacts for the people in the database. This information should record the name and contact information for each of the emergency contacts along with their respective relationship to the person in the database.

PAN tracks its list of clients in the database. For each client, PAN tracks the name and phone number of his or her doctor and attorney. PAN also tracks the date the client was first assigned to the organization. Each client has a list of needs. Examples of these needs include visiting, shopping, housekeeping, transportation, yard work, and food. Each of these needs is also associated with a value indicating its importance to the client (1-10). PAN also tracks the list of insurance policies that each client has. Each insurance policy has a unique policy id, a provider id, provider address, and a type such as life, health, home, or auto.

PAN provides care for each client using teams that contain many volunteers. Each team cares for several clients, and more than one team may care for a client. Each team is identified by its name, and each team also has a type and a date it was formed. A volunteer may serve on multiple teams. For each volunteer, the database should store the date he or she first joined PAN and the date and location of his or her most recent training course. In addition, PAN should record the number of hours a volunteer worked each month for a particular team. Note that the volunteers do not work the same number of hours each month. One of the volunteers on a team serves as the team leader. This information should be tracked in the database as well. In addition, volunteers and clients may switch teams; so, the database system should provide the ability to mark whether or not each volunteer and client is active or inactive on a specific team.

Every team reports periodically to one PAN employee to discuss its current status, and more than one team may report to the same employee. The database should record the date of each report as well as a description of its content. For each employee, the database should store the employee's salary, marital status, and hire date. An employee may charge several expenses each month. The database should track the date of the expense, along with the amount and its description.
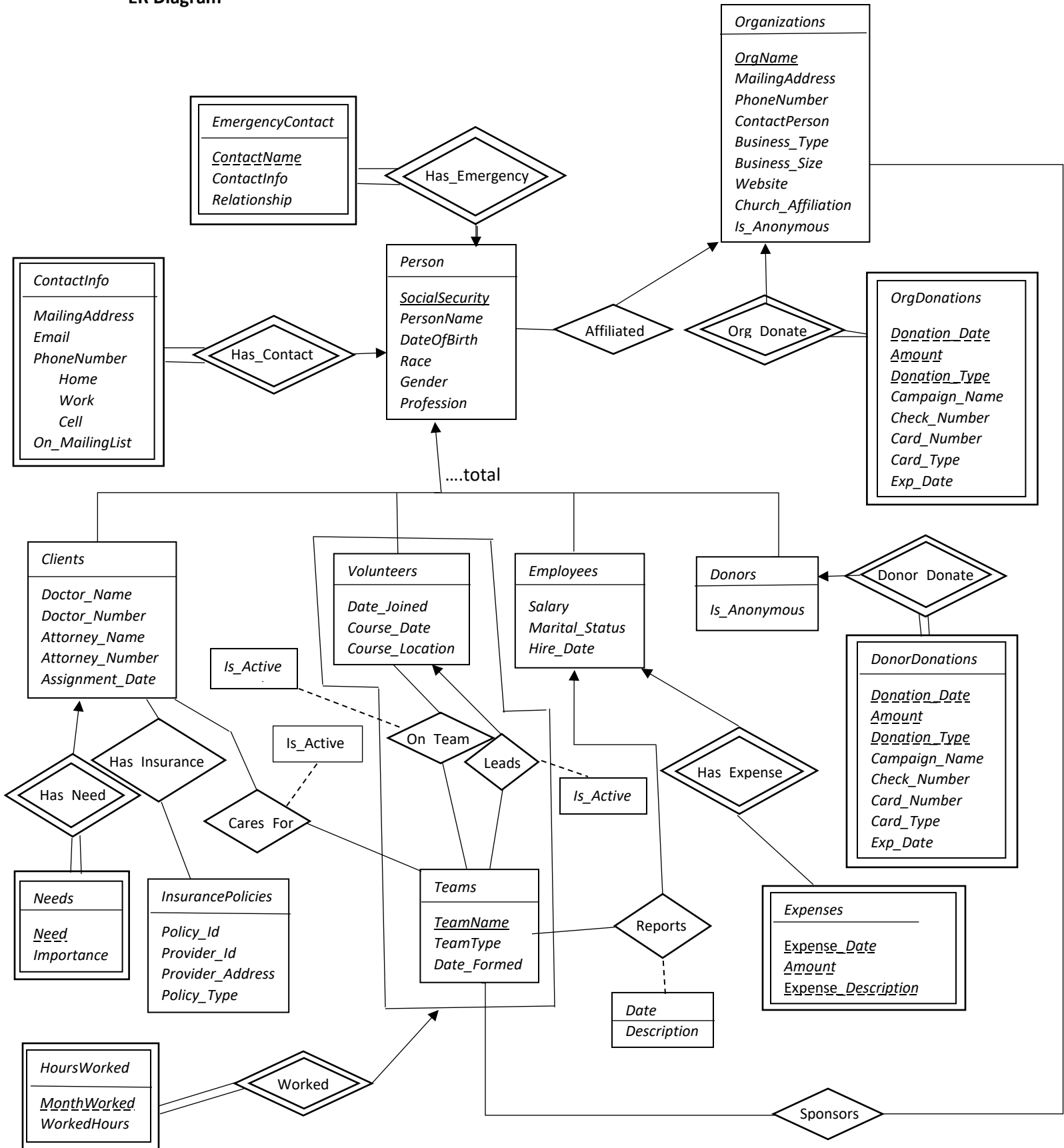
PAN depends on support from its donors. The database should track these people as well as record each of their donations. This information should include the date, amount, and type of donation along with the name of the fund raising campaign that generated the donation if it is applicable. If the donation was made by check, the database should record the check number. If the donation was made by credit card, the database should record the card number, card type, and expiration date. In addition, each donor may wish to remain anonymous, so the database should record that information as well. Each person in the database may be affiliated with an external organization. The database should track this information as well. Each organization should have a unique name, mailing address, phone number, and contact person. In addition, each organization may sponsor one or more PAN teams, and a team may have more than one sponsor. If the organization is a business, the

database should record the business type, size, and company web site. If the organization is a church, the database should record its religious affiliation. Each organization may also make several donations to PAN, and the database should track the same donation information as it does for individual donors. This includes the ability for the organization to make anonymous donations.

Required Queries for the PAN Database System

1. Enter a new team into the database
2. Enter a new client into the database and associate him or her with one or more teams
3. Enter a new volunteer into the database and associate him or her with one or more teams
4. Enter the number of hours a volunteer worked this month for a particular team
5. Enter a new employee into the database and associate him or her with one or more teams
6. Enter an expense charged by an employee
7. Enter a new organization and associate it to one or more PAN teams
8. Enter a new donor and associate him or her with several donations
9. Enter a new organization and associate it with several donations
10. Retrieve the name and phone number of the doctor of a particular client
11. Retrieve the total amount of expenses charged by each employee for a particular time period. The list should be sorted by the total amount of expenses
12. Retrieve the list of volunteers that are members of teams that support a particular client
13. Retrieve the names and contact information of the clients that are supported by teams sponsored by an organization whose name starts with a letter between B and K. The client list should be sorted by name
14. Retrieve the name and total amount donated by donors that are also employees. The list should be sorted by the total amount of the donations, and indicate if each donor wishes to remain anonymous
15. Retrieve the names of all teams that were founded after a particular date
16. Increase the salary by 10% of all employees to whom more than one team must report.
17. Delete all clients who do not have health insurance and whose value of importance for transportation is less than 5

ER Diagram

Organizations

OrgName
MailingAddress
PhoneNumber
ContactPerson
Business_Type
Business_Size
Website
Church_Affiliation
Is_Anonymous

EmergencyContact

ContactName
ContactInfo
Relationship

Has_Emergency

ContactInfo

MailingAddress
Email
PhoneNumber
  Home
  Work
  Cell
On_MailingList

Has_Contact

Person

SocialSecurity
PersonName
DateOfBirth
Race
Gender
Profession

Affiliated

Org_Donate

OrgDonations

Donation_Date
Amount
Donation_Type
Campaign_Name
Check_Number
Card_Number
Card_Type
Exp_Date

….total

Clients

Doctor_Name
Doctor_Number
Attorney_Name
Attorney_Number
Assignment_Date

Volunteers

Date_Joined
Course_Date
Course_Location

Employees

Salary
Marital_Status
Hire_Date

Donors

Is_Anonymous

Donor_Donate

Is_Active

Has Insurance

On Team

Leads

Has Expense

Has Need

Is_Active

DonorDonations

Donation_Date
Amount
Donation_Type
Campaign_Name
Check_Number
Card_Number
Card_Type
Exp_Date

Cares For

Is_Active

Needs

Need
Importance

InsurancePolicies

Policy_Id
Provider_Id
Provider_Address
Policy_Type

Teams

TeamName
TeamType
Date_Formed

Reports

Expenses

Expense_Date
Amount
Expense_Description

HoursWorked

MonthWorked
WorkedHours

Worked

Date
Description

Sponsors

Relational Database

Person(<u>SocialSecurity</u>, PersonName, DateOfBirth, Race, Gender, Profession)
Clients(<u>Person_SocialSecurity</u>, Doctor_Name, Doctor_Number, Attorney_Name,
      Attorney_Number, Assignment_Date)
Volunteers(<u>Person_SocialSecurity</u>, Date_Joined, Course_Date, Course_Location)
Employees(<u>Person_SocialSecurity</u>, Salary, Marital_Status, Hire_Date)
Donors(<u>Person_SocialSecurity</u>, Is_Anonymous)
Teams(Team<u>Name</u>, TeamType, Date_Formed)
Organizations(Org<u>Name</u>, MailingAddress, PhoneNumber, ContactPerson, Business_Type,
      Business_Size, Webiste, Church_Affiliation, Is_Anonymous)
InsurancePolicies(<u>Policy_id</u>, Provider_id, Provider_Address, Policy_Type)
ContactInfo(<u>Person_SocialSecurity</u>, MailingAddress, Email, PhoneNumber_Home,
      PhoneNumber_Work, PhoneNumber_Cell, On_MailingList)
EmergencyContact(<u>Person_SocialSecurity</u>, <u>ContactName</u>, ContactInfo, Relationship)
Needs(<u>Clients_SocialSecurity</u>, <u>Need</u>, Importance)
HoursWorked(<u>Volunteers_SocialSecurity</u>, <u>Teams_Name</u>, Monthworked, WorkedHours)
Expenses(<u>Employees_SocialSecurity</u>, <u>Expense_Date</u>, <u>Amount</u>, <u>Expense_Description</u>)
DonorDonations(<u>Donors_SocialSecurity</u>, <u>Donation_Date</u>, <u>Amount</u>, <u>Donation_Type</u>,
      Campaign_Name, Check_Number, Card_Number, Card_Type, Exp_Date)
OrgDonations(<u>Organizations_Name</u>, <u>Donation_Date</u>, <u>Amount</u>, <u>Donation_Type</u>,
      Campaign_Name, Check_Number, Card_Number, Card_Type, Exp_Date)
Affiliated(<u>Person_SocialSecurity</u>, <u>Organizations_Name</u>)
Has_Insurance(<u>Clients_SocialSecurity</u>, <u>InsurancePolicies_Policy_id</u>)
Cares_For(<u>Clients_SocialSecurity</u>, <u>Teams_Name</u>, Is_Active)
On_Team(<u>Volunteers_SocialSecurity</u>, <u>Teams_Name</u>, Is_Active)
Leads(<u>Volunteers_SocialSecurity</u>, <u>Teams_Name</u>, Is_Active)
Reports(<u>Employees_SocialSecurity</u>, <u>Teams_Name</u>, Date, Description)
Sponsors(<u>Teams_Name</u>, <u>Organizations_Name</u>)

Data Dictionary

Person sorted by name

Name	Type	Size (bytes)	Constraints
SocialSecurity	INT	4	PRIMARY KEY
PersonName	VARCHAR(64)	66	NOT NULL
DateOfBirth	VARCHAR(10)	12	NOT NULL
Race	VARCHAR(32)	34	NOT NULL
Gender	VARCHAR(8)	10	NOT NULL
Profession	VARCHAR(64)	66	NOT NULL

Clients

Name	Type	Size (bytes)	Constraints
Person_SocialSecuirty	INT	4	PRIMARY KEY
Doctor_Name	VARCHAR(64)	66	NOT NULL
Doctor_Number	VARCHAR(16)	18	NOT NULL
Attorney_Name	VARCHAR(64)	66	NOT NULL
Attorney_Number	VARCHAR(16)	18	NOT NULL
Assignment_Date	VARCHAR(10)	12	NOT NULL

Volunteers

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
Date_Joined	VARCHAR(10)	12	NOT NULL
Course_Date	VARCHAR(10)	12	NOT NULL
Course_Location	VARCHAR(32)	34	NOT NULL

Employees

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
Salary	INT	4	NOT NULL
Marital_Status	VARCHAR(10)	12	NOT NULL
Hire_Date	VARCHAR(10)	12	NOT NULL

Donors

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
Is_Anonymous	VARCHAR(3)	5	NOT NULL

Teams

Name	Type	Size (bytes)	Constraints
TeamName	VARCHAR(64)	66	PRIMARY KEY
TeamType	VARCHAR(16)	18	NOT NULL
Date_Formed	VARCHAR(10)	12	NOT NULL

Organizations

Name	Type	Size (bytes)	Constraints
OrgName	VARCHAR(64)	66	PRIMARY KEY
MailingAddress	VARCHAR(64)	66	NOT NULL
PhoneNumber	VARCHAR(16)	18	NOT NULL
ContactPerson	VARCHAR(64)	66	NOT NULL
Business_Type	VARCHAR(32)	34	NONE
Business_Size	INT	4	NONE
Website	VARCHAR(64)	66	NONE
Church_Affiliation	VARCHAR(16)	18	NONE
Is_Anonymous	VARCHAR(3)	5	NONE

InsurancePolicies

Name	Type	Size (bytes)	Constraints
Policy_id	VARCHAR(10)	12	PRIMARY KEY
Provider_id	VARCHAR(10)	12	NOT NULL
Provider_Address	VARCHAR(64)	66	NOT NULL
Policy_Type	VARCHAR(16)	18	NOT NULL

ContactInfo

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
MailingAddress	VARCHAR(64)	66	NOT NULL
Email	VARCHAR(32)	34	NOT NULL
PhoneNumber_Home	VARCHAR(16)	18	NONE
PhoneNumber_Work	VARCHAR(16)	18	NONE
PhoneNumber_Cell	VARCHAR(16)	18	NONE
On_MailingList	VARCHAR(3)	5	NOT NULL

EmergencyContact

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
ContactName	VARCHAR(64)	66	PRIMARY KEY
ContactInfo	VARCHAR(64)	66	NOT NULL
Relationship	VARCHAR(16)	18	NOT NULL

Needs

Name	Type	Size (bytes)	Constraints
Clients_SocialSecurity	INT	4	PRIMARY KEY
Need	VARCHAR(16)	18	NOT NULL
Importance	INT	4	NOT NULL

HoursWorked

Name	Type	Size (bytes)	Constraints
Volunteers_SocialSecurity	INT	4	PRIMARY KEY
Teams_Name	VARCHAR(64)	66	PRIMARY KEY
MonthWorked	VARCHAR(10)	12	NOT NULL
WorkedHours	INT	4	NOT NULL

Expenses sort by amount

Name	Type	Size (bytes)	Constraints
Employees_SocialSecurity	INT	4	PRIMARY KEY
Expense_Date	VARCHAR(10)	12	PRIMARY KEY
Amount	INT	4	PRIMARY KEY
Expense_Description	VARCHAR(150)	152	PRIMARY KEY

DonorDonations

Name	Type	Size (bytes)	Constraints
Donors_SocialSecurity	INT	4	PRIMARY KEY
Donation_Date	VARCHAR(10)	12	NOT NULL
Amount	INT	4	NOT NULL
Donation_Type	VARCHAR(16)	18	NOT NULL
Campaign_Name	VARCHAR(64)	66	NONE
Check_Number	BIGINT	8	NONE
Card_Number	BIGINT	8	NONE
Card_Type	VARCHAR(16)	18	NONE
Exp_Date	VARCHAR(8)	10	NONE

Affiliated

Name	Type	Size (bytes)	Constraints
Person_SocialSecurity	INT	4	PRIMARY KEY
Organization_Name	VARCHAR(64)	66	PRIMARY KEY

OrgDonations

Name	Type	Size (bytes)	Constraints
Organizations_Name	INT	4	PRIMARY KEY
Donation_Date	VARCHAR(10)	12	PRIMARY KEY
Amount	INT	4	PRIMARY KEY
Donation_Type	VARCHAR(16)	18	PRIMARY KEY
Campaign_Name	VARCHAR(64)	66	NONE
Check_Number	BIGINT	8	NONE
Card_Number	BIGINT	8	NONE
Card_Type	VARCHAR(16)	18	NONE
Exp_Date	VARCHAR(8)	10	NONE

Has_Insurance

Name	Type	Size (bytes)	Constraints
Clients_SocialSecurity	INT	4	PRIMARY KEY
InsurancePolicies_Policy_id	VARCHAR(10)	12	PRIMARY KEY

Cares_For

Name	Type	Size (bytes)	Constraints
Clients_SocialSecurity	INT	4	PRIMARY KEY
Teams_Name	VARCHAR(64)	66	PRIMARY KEY
Is_Active	VARCHAR(3)	5	NOT NULL

On_Team

Name	Type	Size (bytes)	Constraints
Volunteers_SocialSecurity	INT	4	PRIMARY KEY
TeamName	VARCHAR(64)	66	PRIMARY KEY
Is_Active	VARCHAR(3)	5	NOT NULL

Leads

Name	Type	Size (bytes)	Constraints
Volunteers_SocialSecurity	INT	4	PRIMARY KEY
TeamName	VARCHAR(64)	66	PRIMARY KEY
Is_Active	VARCHAR(3)	5	NOT NULL

Reports

Name	Type	Size (bytes)	Constraints
Employees_SocialSecurity	INT	4	PRIMARY KEY
TeamName	VARCHAR(64)	66	PRIMARY KEY
Report_Date	VARCHAR(10)	12	NOT NULL
Report_Description	VARCHAR(150)	152	NOT NULL

Sponsors

Name	Type	Size (bytes)	Constraints
TeamName	VARCHAR(64)	66	PRIMARY KEY
Organizations_Name	VARVAHR(64)	66	PRIMARY KEY

Example Query Execution

List of established queries:
```
1) Insert new team;
2) Insert new client and associate them to their team(s);
3) Insert new volunteer and associate them with their team(s);
4) Insert number of hours a volunteer worked for a team;
5) Insert ne employee and associate them with their team(s);
6) Insert an expense made by an employee;
7) Insert new organization and associate them with their team(s);
8) Insert new donor and enter their donations;
9) Insert new organization and enter their donations;
10) Display the name and phone number of the doctor of a client;
11) Display the total expenses for each employee;
12) Display the volunteers that are on a team that support a client;
13) Display the names and contact info of clients that
     are supported by teams sponsored by organizations with
     names that start with letters between B and K;
14) Display the name and total donation amount for all donors;
15) Display all teams founded before  a date;
16) Increase all employees salary by 10% that more than one team report to
17) Delete clients that don't have health insurance and have
     and importance level for transportation that is <5;
18) Enter new teams from specified .txt file;
19) Send names and mailing addresses of people on the mialing list
     to a specified .txt file;
20) Exit
```

Insert new team:
```
Please select one of the options below: …
```
1
```
Team Name:
```
A Team
```
Team Type:
```
Discrete
```
Formation Date (YYYY-MM-DD):
```
1999-07-13
```
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.
```

Results:

TeamName	TeamType	Date_Formed
A Team	Discrete	1999-07-13

Insert new client and associate them to their team(s);
```
Please select one of the options below: …
```
2
```
Client Social Security Number:
```
12345

Client Name:
Mikey Williams
Client Date of Birth (YYYY-MM-DD):
1994-12-05
Client Race:
White
Client Gender:
Male
Client Profession:
Lawyer
Client Mailing Address:
123 N Road
Client Email:
mikey@gmail.com
Client's Home Phone Number (Enter NA if none):
NA
Client's Work Phone Number (Enter NA if none):
NA
Client's Cell Phone Number (Enter NA if none):
4056159268
On Mailing List? (Yes or No):
Yes
Client's Doctor's Name:
Jill
Client's Doctor's Number:
1234567
Client's Attorney Name:
Molly
Client's Attorney Number:
4567891
Client's Assignment Date (YYYY-MM-DD):
2009-06-19
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	PersonName	DateOfBirth	Race	Gender	Profession
12345	Mikey Williams	1994-12-05	White	Male	Lawyer

SocialSecurity	MailingAddress	Email	PhoneNumber_Home	PhoneNumber_Work	PhoneNumber_Cell	On_MailingList
12345	123 N Road	mikey@gmail.com	NA	NA	4056159268	Yes

SocialSecurity	Doctor_Name	Doctor_Number	Attorney_Name	Attorney_Number	Assignment_Date
12345	Jill	1234567	Molly	4567891	2009-06-19

Insert new volunteer and associate them with their team(s);
Please select one of the options below: …
3
Volunteer Social Security Number:
98765
Volunteer Name:
Rebecca James
Volunteer Date of Birth (YYYY-MM-DD):
1989-11-26
Volunteer Race:
White
Volunteer Gender:
Female
Volunteer Profession:
Teacher
Volunteer Mailing Address:
16594 SW Street
Volunteer Email:
rebecca@hotmail.com
Volunteer's Home Phone Number (Enter NA if none):
NA
Volunteer's Work Phone Number (Enter NA if none):
NA
Volunteer's Cell Phone Number (Enter NA if none):
1234569
On Mailing List? (Yes or No):
Yes
Volunteer's Join Date (YYYY-MM-DD):
2018-01-10
Volunteer's Most Recent Training Course Date (YYYY-MM-DD):
2019-03-16
Volunteer's Most Recent Training Course Location:
Oklahoma City
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

How many teams are the client associated with?
2
Team Name:
Sooners
Active Status (Yes or No):
Yes
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.
Team Name:
Hard Hats
Active Status (Yes or No):
No
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	PersonName	DateOfBirth	Race	Gender	Profession
12345	Mikey Williams	1994-12-05	White	Male	Lawyer
23456	Janet Jackson	1984-03-15	Black	Female	Actress
34567	Missy Elliot	1991-10-16	Black	Female	Singer
54321	Jamie Wilson	1990-10-11	Chinese	Female	Doctor
65432	Zach Miller	1994-01-01	Latino	Male	Congressman
98765	Rebecca James	1989-11-26	White	Female	Teacher

SocialSecurity	MailingAddress	Email	PhoneNumber_Home	PhoneNumber_Work	PhoneNumber_Cell	On_MailingList
12345	123 N Road	mikey@gmail.com	NA	NA	4056159268	Yes
23456	234 S Street	janet@hotmail.com	NA	8162465912	4052134578	Yes
34567	5684 NW Road	missy@osu.edu	NA	Na	3216459876	No
54321	564 E Road	prettyFlowers@yahoo.com	NA	NA	6549872	Yes
65432	879 W Road	zach@gmail.com	NA	NA	4056192263	Yes
98765	16594 SW Street	rebecca@hotmail.com	NA	NA	1234569	Yes

SocialSecurity	Date_Joined	Course_Date	Course_Location
98765	2018-01-10	2019-03-16	Oklahoma City

SocialSecurity	TeamName	Is_Active
98765	Hard Hats	No
98765	Sooners	Yes

Insert number of hours a volunteer worked for a team;
Please select one of the options below:
4
Volunteer Social Security Number:
11111
Team Name:
Hard Hats
Month:
November
Hours Worked:
20
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	TeamName	MonthWorked	WorkedHours
11111	Hard Hats	November	20

Insert new employee and associate them with their team(s);
Please select one of the options below: …
5
Employee Social Security Number:

22222
Employee Name:
Megan Lewis
Employee Date of Birth (YYYY-MM-DD):
2001-07-06
Employee Race:
Black
Employee Gender:
Female
Employee Profession:
Manager
Employee Mailing Address:
156 S Circle
Employee Email:
megan@hotmail.com
Employee's Home Phone Number (Enter NA if none):
NA
Employee's Work Phone Number (Enter NA if none):
NA
Employee's Cell Phone Number (Enter NA if none):
Na
On Mailing List? (Yes or No):
Yes
Employee's Salary:
32000
Employee's Marriage Status:
Single
Employee's Hire Date (YYYY-MM-DD):
2018-06-02
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.
How many teams are the employee associated with?
2
Team's Report Date (YYYY-MM-DD):
2020-01-03
Team Name:
MickeyMice
Report Description:
Initial Report
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.
Team's Report Date (YYYY-MM-DD):
2019-03-06
Team Name:
Sooners
Report Description:
Initial report
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	PersonName	DateOfBirth	Race	Gender	Profession
11111	Jackson	1992-12-26	Latino	Male	Teacher
12345	Mikey Williams	1994-12-05	White	Male	Lawyer
22222	Megan Lewis	2001-07-06	Black	Female	Manager
23456	Janet Jackson	1984-03-15	Black	Female	Actress
34567	Missy Elliot	1991-10-16	Black	Female	Singer
44444	Kim Possible	1989-12-05	Latina	Female	CEO
54321	Jamie Wilson	1990-10-11	Chinese	Female	Doctor
55566	Piper Michaels	1990-12-18	White	Female	Secretary
65432	Zach Miller	1994-01-01	Latino	Male	Congressman
87654	Prima Donna	1979-09-18	Black	Female	Janitor
98765	Rebecca James	1989-11-26	White	Female	Teacher

SocialSecurity	MailingAddress	Email	PhoneNumber_Home	PhoneNumber_Work	PhoneNumber_Cell	On_MailingList
11111	1564 W Road	jackson@aol.com	NA	NA	Na	No
12345	123 N Road	mikey@gmail.com	NA	NA	4056159268	Yes
22222	156 S Circle	megan@hotmail.com	NA	NA	Na	Yes
23456	234 S Street	janet@hotmail.com	NA	8162465912	4052134578	Yes
34567	5684 NW Road	missy@osu.edu	NA	Na	3216459876	No
44444	555 S Road	kim@gmail.com	NA	NA	NA	No
54321	564 E Road	prettyFlowers@yahoo.com	NA	NA	6549872	Yes
55566	555 W Mountain Rd	piper@gmail.com	NA	NA	NA	Yes
65432	879 W Road	zach@gmail.com	NA	NA	4056192263	Yes
87654	999 E Coast Dr.	prima@gmail.com	NA	NA	6543218	Yes
98765	16594 SW Street	rebecca@hotmail.com	NA	NA	1234569	Yes

SocialSecurity	Salary	Marital_Status	Hire_Date
22222	32000	Single	2018-06-02

SocialSecurity	TeamName	Report_Date	Report_Description
22222	MickeyMice	2020-01-03	Initial Report
22222	Sooners	2019-03-06	Initial report

Insert an expense made by an employee;

Please select one of the options below: …
6
Employee Social Security Number:
22222
Expense Date (YYYY-MM-DD):
2020-08-16
Expense Amount:
2600
Expense Description:
New Computer
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	Expense_Date	Amount	Expense_Description
22222	2020-08-16	2600	New Computer

Insert new organization and associate them with their team(s);

Please select one of the options below: …
7
Organization Name:
McDonalds
Mailing Address
153 McDrive
Phone Number:
5423265
Contact Person:
McDonlad
Organization Type:
Food
Size:
564

Website:
mcdonalds.com
Religious Affiliation (Enter NA if none):
NA
Anonymous (Yes or No):
No
Dispatching the query...
Done. 1 rows inserted.
How many teams does the organization sponsor?
2
Team Name:
Sooners
Dispatching the query...
Done. 1 rows inserted.
Team Name:
Givers
Dispatching the query...
Done. 1 rows inserted.

Results:

OrgName	MailingAddress	PhoneNumber	ContactPerson	Business_Type	Business_Size	Website	Church_Affiliation	Is_Anonymous
McDonalds	153 McDrive	5423265	McDonlad	Food	564	mcdonalds.com	NA	No

TeamName	OrgName
Givers	McDonalds
Sooners	McDonalds

Insert new donor and enter their donations;
Please select one of the options below: …
8
Donor Social Security Number:
12121
Donor Name:
Brooks Williams
Donor Date of Birth (YYYY-MM-DD):
1982-06-05
Donor Race:
White
Donor Gender:
Male
Donor Profession:
Doctor
Donor Mailing Address:
456 Pineapple Cove
Donor Email:
brooks@gmail.com
Donor's Home Phone Number (Enter NA if none):
NA
Donor's Work Phone Number (Enter NA if none):
4562134
Donor's Cell Phone Number (Enter NA if none):

1234564
On Mailing List? (Yes or No):
Yes
Is Anonymous (Yes or No):
No
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.
How many donations did the donor make?
1
Donation Date:
2020-01-09
Donation Amount:
25000
Donation Type:
Generous
Campaign Name (NA if none):
NA
Check Number (Enter 0 if none):
0
Card Number (Enter 0 if none):
0
Card Type (Enter 0 if none):
0
Experiation Date (MM/YYYY):
NA
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

Results:

SocialSecurity	PersonName	DateOfBirth	Race	Gender	Profession
11111	Jackson	1992-12-26	Latino	Male	Teacher
12121	Brooks Williams	1982-06-05	White	Male	Doctor
12345	Mikey Williams	1994-12-05	White	Male	Lawyer
22222	Megan Lewis	2001-07-06	Black	Female	Manager
23456	Janet Jackson	1984-03-15	Black	Female	Actress
33333	Zach Lewis	1998-05-09	White	Male	Marketing Director
34567	Missy Elliot	1991-10-16	Black	Female	Singer
44444	Kim Possible	1989-12-05	Latina	Female	CEO
54321	Jamie Wilson	1990-10-11	Chinese	Female	Doctor
55555	Cori Michaelson	1970-02-22	White	Female	HR
55566	Piper Michaels	1990-12-18	White	Female	Secretary
65432	Zach Miller	1994-01-01	Latino	Male	Congressman
77777	Randal	1969-12-26	Latino	Male	Builder
87654	Prima Donna	1979-09-18	Black	Female	Janitor
88888	Lauren White	2000-06-09	White	Female	Secretary
98765	Rebecca James	1989-11-26	White	Female	Teacher

SocialSecurity	MailingAddress	Email	PhoneNumber_Home	PhoneNumber_Work	PhoneNumber_Cell	On_MailingList
11111	1564 W Road	jackson@aol.com	NA	NA	Na	No
12121	456 Pineapple Cove	brooks@gmail.com	NA	4562134	1234564	Yes
12345	123 N Road	mikey@gmail.com	NA	NA	4056159268	Yes
22222	156 S Circle	megan@hotmail.com	NA	NA	Na	Yes
23456	234 S Street	janet@hotmail.com	NA	8162465912	4052134578	Yes
33333	5656 E Road	zach@hotmial.com	NA	NA	Na	Yes
34567	5684 NW Road	missy@osu.edu	NA	Na	3216459876	No
44444	555 S Road	kim@gmail.com	NA	NA	NA	No
54321	564 E Road	prettyFlowers@yahoo.com	NA	NA	6549872	Yes
55555	cori@outlook.com	cori@outlook.com	Na	Na	5648945	No
55566	555 W Mountain Rd	piper@gmail.com	NA	NA	NA	Yes
65432	879 W Road	zach@gmail.com	NA	NA	4056192263	Yes
77777	156 Long Beach Rd	randal@gmail.com	NA	NA	5643333	Yes
87654	999 E Coast Dr.	prima@gmail.com	NA	NA	6543218	Yes
88888	489 NW Street	lauren@gmail.com	NA	Na	6548223	Yes
98765	16594 SW Street	rebecca@hotmail.com	NA	NA	1234569	Yes

SocialSecurity	Is_Anonymous
12121	No

SocialSecurity	Donation_Date	Amount	Donation_Type	Campaign_Name	Check_Number	Card_Number	Card_Type	Exp_Date
12121	2020-01-09	25000	Generous	NA	0	0	0	NA

Insert new organization and enter their donations;
Please select one of the options below: …
9
Organization Name:
Sams Club
Mailing Address
5846 N Ginger Ave
Phone Number:
3692587
Contact Person:
Sam
Organization Type:
SuperStore
Size:
6852
Website:
sams.com
Religious Affiliation (Enter NA if none):
NA
Anonymous (Yes or No):
No
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

How many donations did the organization make?
1
Donation Date:
2020-04-29
Donation Amount:
2525
Donation Type:
Assistance
Campaign Name:
Salary Help
Check Number (Enter 0 if none):
236512
Card Number (Enter 0 if none):
0
Card Type (Enter NA if none):
0
Experiation Date (MM/YYYY):
0
Connecting to the database...
Dispatching the query...
Done. 1 rows inserted.

Results:

OrgName	MailingAddress	PhoneNumber	ContactPerson	Business_Type	Business_Size	Website	Church_Affiliation	Is_Anonymous
Bob Builders	765 W Drive	8794563	Bob	Construction	555	bobbuilders.com	NA	No
Council Road	4568 Council Rd	4568794	Pastor Rick	Church	449	councilroad.com	Baptist	Yes
Disney	153 Orlando Dr	45678945	Walt Disney	Entertainment	8979	disney.com	NA	No
Footlocker	321 E Drive	5468569	Referee Jim	Apparel	546	footlocker.com	NA	Yes
McDonalds	153 McDrive	5423265	McDonald	Food	564	mcdonalds.com	NA	No
Sams Club	5846 N Ginger A…	3692587	Sam	SuperStore	6852	sams.com	NA	No

OrgName	Donation_Date	Amount	Donation_Type	Campaign_Name	Check_Number	Card_Number	Card_Type	Exp_Date
Sams Club	2020-04-29	2525	Assistance	Salary Help	236512	0	0	0

Display the name and phone number of the doctor of a client;

Please select one of the options below: …
10
Client Social Security Number (No -'s):
12345
Connecting to the database...
Dispatching the query...

Results:
Doctor Name | Doctor Number
Jill | 1234567

Display the total expenses for each employee;
Please select one of the options below: …
11
Start Date (YYYY-MM-DD):
2005-02-20
End Date (YYYY-MM-DD):
2020-02-20

```
Connecting to the database...
Dispatching the query...

Results:

Social Security | Total Expense Amount
33333 | 50
77777 | 150
```

Display the volunteers that are on a team that support a client;
```
        Please select one of the options below: …
        12
        Client Social Security(No -'s):
        12345
        Connecting to the database...
        Dispatching the query...

        Results:

        Social Security | Name
        11111 | Jackson
        44444 | Kim Possible
        55566 | Piper Michaels
        98765 | Rebecca James
```

Display the names and contact info of clients that
**   are supported by teams sponsored by organizations with**
**   names that start with letters between B and K;**
```
        Please select one of the options below: …
        13
        Connecting to the database...
        Dispatching the query...

        Results:

        Name | Address | Email | Home | Work | Cell
        Mikey Williams | 123 N Road | mikey@gmail.com | NA | NA | 4056159268
        Janet Jackson | 234 S Street | janet@hotmail.com | NA | 8162465912 |
        4052134578
        Missy Elliot | 5684 NW Road | missy@osu.edu | NA | Na | 3216459876
        Jamie Wilson | 564 E Road | prettyFlowers@yahoo.com | NA | NA | 6549872
        Zach Miller | 879 W Road | zach@gmail.com | NA | NA | 4056192263
```

Display the name and total donation amount for all donors;
```
        Please select one of the options below: …
        14
        Connecting to the database...
        Dispatching the query...
```

Results:

Name | Total Donations | Anonymous?
Zach Lewis | 26500 | No

Display all teams founded before a date;
Please select one of the options below: …
15
Date (YYYY-MM-DD):
2001-01-01
Connecting to the database...
Dispatching the query...

Results:

Team Name
Givers
MickeyMice

Increase all employees salary by 10% that more than one team report to
Please select one of the options below: …
16
Dispatching the query...

Results:

SocialSecurity	Salary	Marital_Status	Hire_Date
22222	35200	Single	2018-06-02
33333	82500	Married	2015-01-09
55555	50600	Married	2008-02-16
77777	70400	Married	2016-06-19
88888	47300	Single	2018-01-06

Delete clients that don't have health insurance and have and importance level for transportation that is <5;
Please select one of the options below: …
17
Dispatching the query...

Results:

SocialSecurity	Doctor_Name	Doctor_Number	Attorney_Name	Attorney_Number	Assignment_Date
12345	Jill	1234567	Molly	4567891	2009-06-19
23456	Molly Fisher	4567891	Mike Zimmerman	65498231	2010-11-26
54321	Jill	1234567	Mike Zimmerman	65498231	2012-09-19
65432	Bill Harold	45678942	Paula Abdul	918564326	2007-01-23

Enter new teams from specified .txt file;

       Please select one of the options below: …

       18

       File Name (ex. file.txt):

       Test18.txt

       EXECUTE Query18 @Name = 'Test Team1', @Type = ' T1', @Date = ' 2002-10-19';Dispatching the query...

       Done. 1 rows inserted.

       EXECUTE Query18 @Name = 'Test Team2', @Type = ' T2', @Date = ' 2003-09-12';Dispatching the query...

       Done. 1 rows inserted.

       EXECUTE Query18 @Name = 'Test Team3', @Type = ' T3', @Date = ' 2010-01-12';Dispatching the query...

       Done. 1 rows inserted.

       Results:

TeamName	TeamType	Date_Formed
A Team	Discrete	1999-07-13
Givers	Financial	2013-08-14
Hard Hats	Labor	2000-12-12
MickeyMice	Creative	2009-10-04
Sooners	Athletic	1974-01-21
Test Team1	T1	2002-10-1
Test Team2	T2	2003-09-1
Test Team3	T3	2010-01-1

Send names and mailing addresses of people on the mialing list to a specified .txt file;

       Please select one of the options below: …

       19

       File Name (ex. file.txt):

       Test19.txt

       Connecting to the database...

       Dispatching the query...

       Results:

🗎 Project.java	🗎 Test18.txt	🗎 Test19.txt ⊠

```
 1 Brooks Williams 456 Pineapple Cove
 2 Cathy Moore 456 N Road
 3 Jamie Wilson 564 E Road
 4 Janet Jackson 234 S Street
 5 Lauren White 489 NW Street
 6 Leo Purdue 4512 Pauline Rd
 7 Megan Lewis 156 S Circle
 8 Mikey Williams 123 N Road
 9 Piper Michaels 555 W Mountain Rd
10 Prima Donna 999 E Coast Dr.
11 Randal 156 Long Beach Rd
12 Rebecca James 16594 SW Street
13 Rodney Wilson 8886 Rich Dr
14 Zach Lewis 5656 E Road
15 Zach Miller 879 W Road
16
```

Exit

20

Results:
Leaving Program.....See Yuh!