

COURSE: CS/DSA-4513 - 001 DATABASE MANAGEMENT SYSTEMS

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PATIENT ASSISTANCE NETWORK

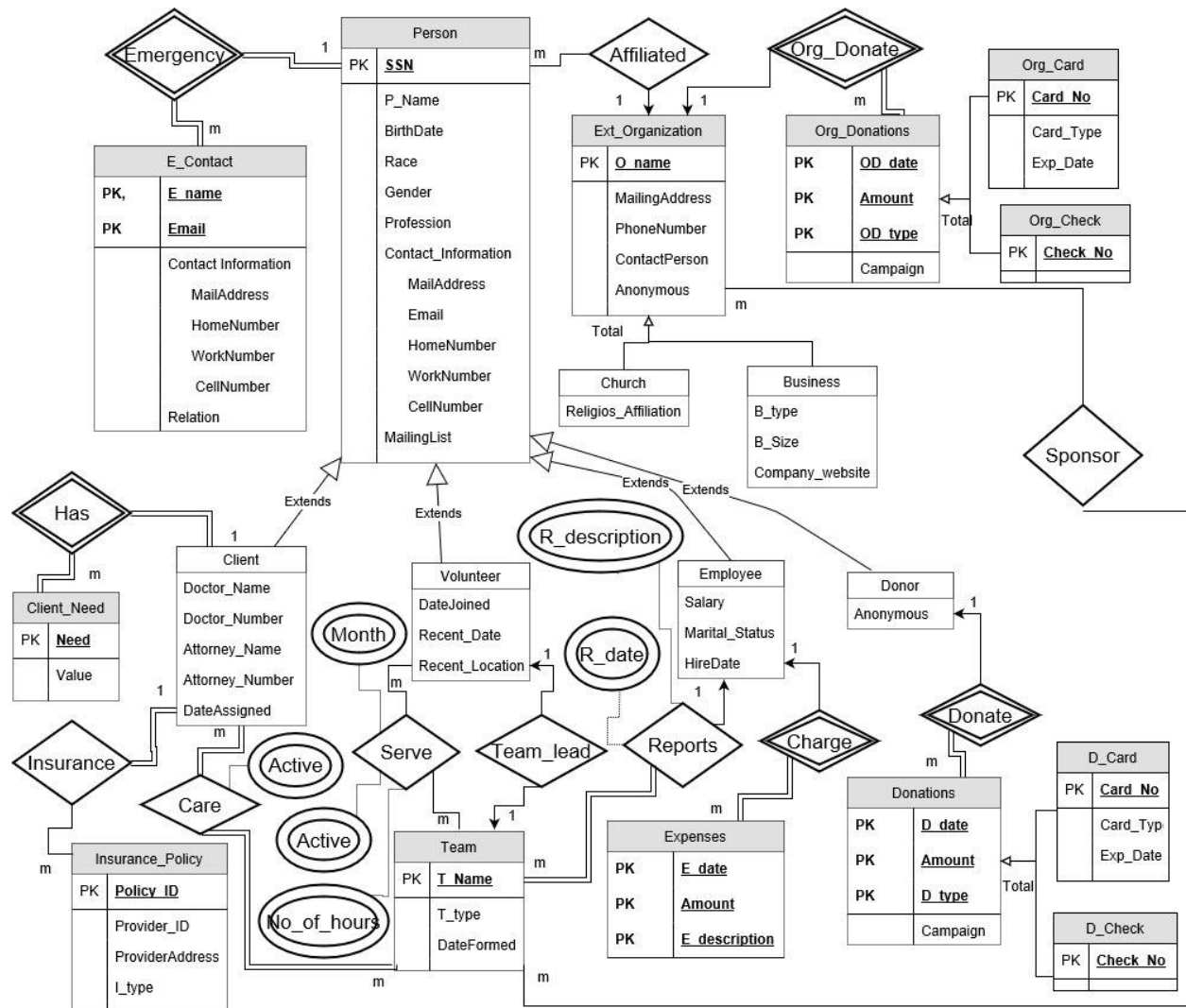
Tasks Performed

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Task 1.

1.1. ER Diagram



1.2 Relational Database

Person (SSN, P_name, BirthDate, Race, Gender, Profession, MailAddress, Email, HomeNumber, WorkNumber, CellNumber, MailingList)

E_Contact (SSN, E_name, Email, MailAddress, HomeNumber, WorkNumber, CellNumber, Relation)

Ext_Organization (O_name, Mailing_Address, ContactPerson, PhoneNumber, Anonymous)

Affiliated (SSN, O_name)

Church (O_name, Religious_Affiliation)

Business (O_name, B_type, B_size, Company_website)

Client (SSN, Doctor_Name, Doctor_Number, Attorney_Name, Attorney_Number, Date_Assigned)

Client_Need (SSN, Need, N_value)

Volunteer (SSN, Date_Joined, Recent_Date, Recent_Location)

Employee (SSN, Salary, Marital_Status, HireDate)

Donor (SSN, Anonymous)

Insurance (Policy_ID, SSN, Provider_ID, ProviderAddress, I_type)

Team (T_name, T_type, DateFormed)

Care (SSN, T_name, Active)

Serve (SSN, T_name, S_month, No_of_hours, Active)

Team_Lead (T_name, SSN)

Sponsor (T_name, O_name)

Report (T_name, SSN, R_date, R_description)

Expenses (SSN, E_date, Amount, E_description)

Donations (SSN, D_date, Amount, D_type, Campaign)

D_Check (SSN, D_date, Amount, D_type, Check_No)

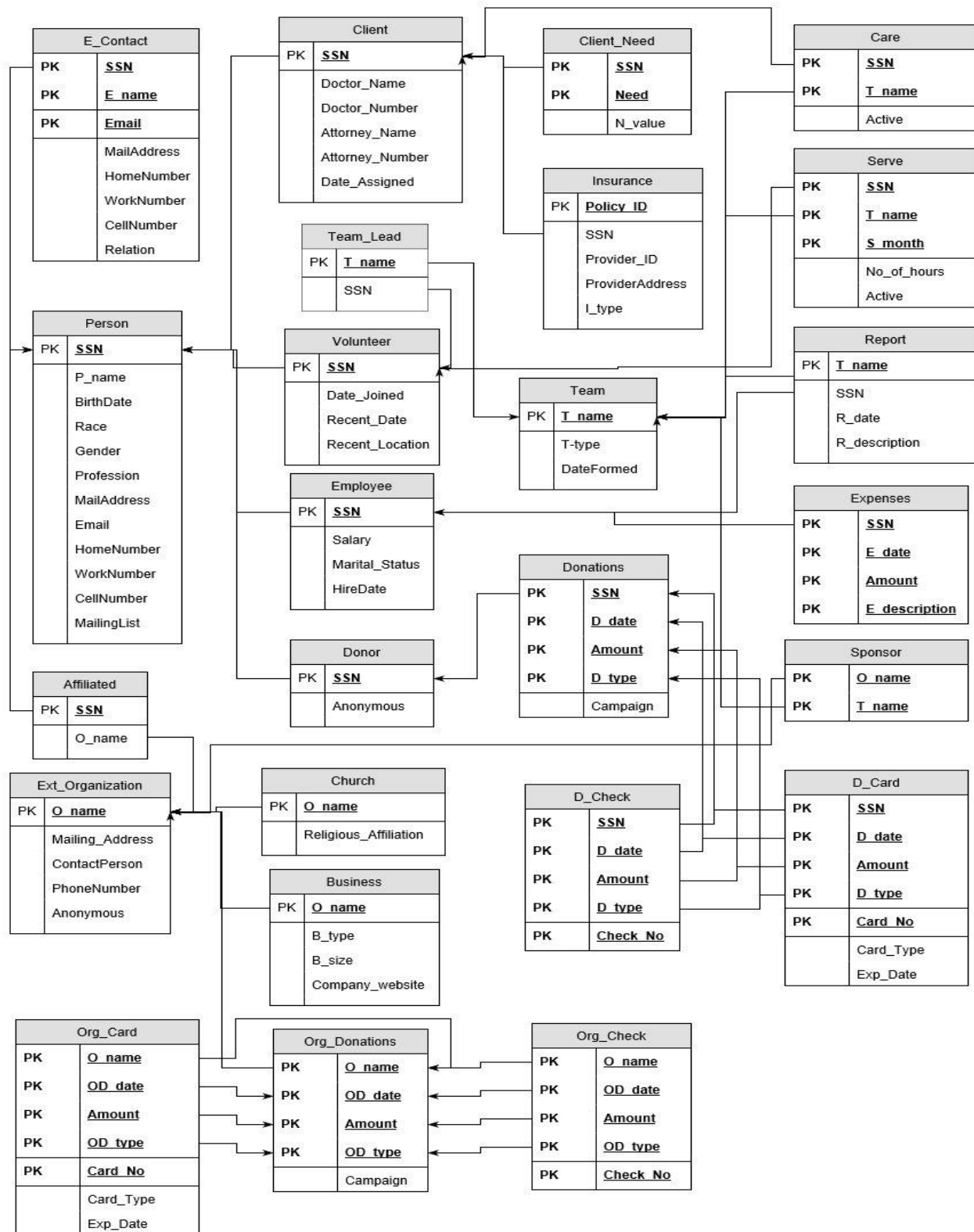
D_Card (SSN, D_date, Amount, D_type, Card_No, Card_Type, Exp_Date)

Org_Donations (O_name, OD_date, Amount, OD_type, Campaign)

Org_Check (O_name, OD_date, Amount, OD_type, Check_No)

Org_Card (O_name, OD_date, Amount, OD_type, Card_No, Card_Type, Exp_Date)

1.3 Relational Database Schema



Task 2. Data Dictionary

Person table

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key
P_name	Varchar (20)	20	
BirthDate	Date	7	
Race	Varchar (20)	20	
Gender	Varchar (10)	10	
Profession	Varchar (20)	20	
MailAddress	Varchar (20)	20	
Email	Varchar (20)	20	
HomeNumber	Number (10)	10	
WorkNumber	Number (10)	10	
CellNumber	Number (10)	10	
MailingList	char	1	

Each tuple: 152 bytes

E_Contact table

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key to Person
E_name	Varchar (20)	20	Not Null, Primary Key
MailAddress	Varchar (20)	20	
Email	Varchar (20)	20	Not Null, Primary Key
HomeNumber	Number (10)	10	
WorkNumber	Number (10)	10	
CellNumber	Number (10)	10	
Relation	Varchar (20)	20	

Each tuple: 114 bytes

Ext_Organization table

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key
Mailing_Address	Varchar (20)	20	
PhoneNumber	Number (10)	10	
ContactPerson	Varchar (20)	20	
Anonymous	Char	1	

Each tuple: 71 bytes

Affiliated Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Person
O_name	Varchar (20)	20	Foreign Key from Ext_Organization

Each tuple: 24 bytes

Church Table:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Ext_Organization
Religious_Affiliation	Varchar (20)	20	

Each tuple: 40 bytes

Business Table:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Ext_Organization
B_Type	Varchar (20)	20	
B_Size	int	4	
Company_website	Varchar (30)	30	

Each tuple: 74 bytes

Client Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Person
Doctor_Name	Varchar (20)	20	
Doctor_Number	Number (10)	10	
Attorney_Name	Varchar (20)	20	
Attorney_Number	Number (10)	10	
Date_Assigned	Date	7	

Each tuple: 71 bytes

Client_Need table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Foreign Key from Client, Not Null, Primary Key
Need	Varchar (20)	20	Not Null, Primary Key
N_value	int	4	

Each tuple: 28 bytes

Volunteer Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Person
Date_Joined	Date	7	
Recent_Date	Date	7	
Recent_Location	Varchar (20)	20	

Each tuple: 38 bytes

Employee Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Person
Salary	Number (10,2)	10	
Marital_Status	Varchar (12)	12	
HireDate	Date	7	

Each tuple: 33 bytes

Donor Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Person
Anonymous	char	1	

Each tuple: 5 bytes

Insurance Table:

Column Name	Data Type	Size(bytes)	
Policy_ID	Varchar (20)	20	Not Null, Primary Key
SSN	int	4	
Provider_ID	Varchar (20)	20	
ProviderAddress	Varchar (20)	20	
I_type	Varchar (10)	10	

Each tuple: 74 bytes

Team table:

Column Name	Data Type	Size(bytes)	
T_name	Varchar (20)	20	Not Null, Primary Key
T_type	Varchar (20)	20	
Date_Formed	Date	7	

Each tuple: 47 bytes

Care Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Client
T_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Team
Active	char	1	

Each tuple: 25 bytes

Serve Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Volunteers
T_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Team
S_month	int	4	Not Null, primary key
No_of_hours	int	4	
Active	char	1	

Each tuple: 33 bytes

Team_Lead Table:

Column Name	Data Type	Size(bytes)	
T_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Team
SSN	Int	4	Foreign Key from Volunteers

Each tuple: 24 bytes

Sponsor Table:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Ext_Organization
T_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Team

Each tuple: 40 bytes

Report table:

Column Name	Data Type	Size(bytes)	
T_name	Varchar (20)	20	Not Null, Primary Key, Foreign Key from Team
SSN	Int	4	Foreign Key from Employee
R_date	Date	7	
R_description	Varchar (100)	50	

Each tuple: 81 bytes

Expenses Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Employee
E_date	Date	7	Not Null, Primary Key
Amount	Number (10,2)	10	Not Null, Primary Key
E_description	Varchar (50)	50	Not Null, Primary Key

Each tuple: 71 bytes

Donations Table:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Donors
D_date	Date	7	Not Null, Primary Key
Amount	Number (10,2)	10	Not Null, Primary Key
D_type	Varchar (12)	12	Not Null, Primary key
Campaign	Varchar (20)	20	

Each tuple: 53 bytes

D_Check:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Donations
D_date	Date	7	Not Null, Primary Key, Foreign Key from Donations
Amount	Number (10,2)	10	Not Null, Primary Key, Foreign Key from Donations
D_type	Varchar (12)	12	Not Null, Primary Key, Foreign Key from Donations
Check_No	Varchar (10)	10	Not Null, Primary Key

Each tuple: 43 bytes

D_Card:

Column Name	Data Type	Size(bytes)	
SSN	Int	4	Not Null, Primary Key, Foreign Key from Donations
D_date	Date	7	Not Null, Primary Key, Foreign Key from Donations
Amount	Number (10,2)	10	Not Null, Primary Key, Foreign Key from Donations
D_type	Varchar (12)	12	Not Null, Primary Key, Foreign Key from Donations
Card_No	Varchar (20)	20	Not Null, Primary Key
Card_Type	Varchar (15)	15	
Exp_Date	Date	7	

Each tuple: 75 bytes

Org_Donations Table:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key Foreign Key from Ext_Organization
OD_date	Date	7	Not Null, Primary Key
Amount	Number (10,2)	10	Not Null, Primary Key
OD_type	Varchar (12)	12	Not Null, Primary Key
Campaign	Varchar (20)	20	

Each tuple: 69 bytes

Org_Check:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key Foreign Key from Org_Donations
OD_date	Date	7	Not Null, Primary Key, Foreign Key from Org_Donations
Amount	Number (10,2)	10	Not Null, Primary Key, Foreign Key from Org_Donations
OD_type	Varchar (12)	12	Not Null, Primary Key, Foreign Key from Org_Donations
Check_No	Varchar (10)	10	Not Null, Primary Key

Each tuple: 59 bytes

Org_Card:

Column Name	Data Type	Size(bytes)	
O_name	Varchar (20)	20	Not Null, Primary Key Foreign Key from Org_Donations
OD_date	Date	7	Not Null, Primary Key, Foreign Key from Org_Donations
Amount	Number (10,2)	10	Not Null, Primary Key, Foreign Key from Org_Donations
OD_type	Varchar (12)	12	Not Null, Primary Key, Foreign Key from Org_Donations
Card_No	Varchar (20)	20	Not Null, Primary Key
Card_Type	Varchar (15)	15	

Exp_Date	Date	7	
----------	------	---	--

Each row: 91 bytes

Task 3

3.1. Discussion of storage structures for tables

Table Name	Query	Type	Search key	Frequency	File Organization
Person	2	Insert		1/week	Dynamic Hashing with key = SSN
	3	Insert		2/month	
	5	Insert		1/year	
	8	Insert		1/day	
	13	Random search	SSN	1/week	
	14	Random search	SSN	1/week	
	14	Random Search	P_name	1/week	
	15	Random search	SSN	1/month	
E_Contact	2	Insert		1/week	Heap File
	3	Insert		2/month	
	5	Insert		1/year	
	8	Insert		1/day	
Ext_Organization	7	Insert		2/week	Heap File
	9	Insert		1/day	
Affiliated					Heap File
Church	7	Insert		2/week	Heap File
	9	Insert		1/day	
Business	7	Insert		2/week	Heap File
	9	Insert		1/day	
Client	2	Insert		1/week	Dynamic Hashing with key = SSN
	10	Random Search	SSN	1/week	
	17	Delete by Random Search	SSN	4/year	
Client_Need	2	Insert		1/week	Dynamic Hashing with key = SSN
	17	Range Search	N_Value	4/year	
	17	Random Search	Need	4/year	
	17	Random Search	SSN	4/year	
Volunteer	3	Insert		2/month	Dynamic Hashing with key = SSN
	4	Random Search	SSN	30/month	
Employee	5	Insert		1/year	Dynamic Hashing with key = SSN
	6	Random Search	SSN	1/day	
	14	Random Search	SSN	1/week	
	16	Random Search	SSN	1/year	
	16	Update	Salary	1/year	
Donor	8	Insert		1/day	Dynamic Hashing with key = SSN
	14	Random Search	SSN	1/week	
	14	Random Search	Anonymous	1/week	
Insurance	2	Insert		1/week	Dynamic Hashing with key = I_type
	17	Random Search	I_type	4/year	

Team	1	Insert		1/month	Dynamic Hashing with key =T_name
	4	Random Search	T_name	30/month	
Care	2	Insert		1/week	Dynamic Hashing with key =T_name
	12	Random Search	SSN	4/year	
	13	Random Search	T_name	1/week	
Serve	3	Insert		2/month	Dynamic Hashing with key = T_name
	4	Insert		30/month	
	12	Random Search	T_name	4/year	
	15	Random Search	No_of_hours	1/month	
	15	Random Search	T_name	1/month	
	15	Random Search	S_month	1/month	
TeamLead					Heap File
Sponsor	7	Insert		2/week	B+ Tree with key = O_name
	13	Range Search	O_name	1/week	
Report	5	Insert		1/year	Dynamic Hashing with key = SSN
	16	Random Search	SSN	1/year	
Expenses	6	Insert		1/day	Dynamic Hashing with key = SSN
	11	Range Search	E_date	1/month	
	11	Random Search	SSN	1/month	
Donation	8	Insert		1/day	Dynamic Hashing with key = SSN
	14	Random	SSN	1/week	
D_Check	8	Insert		1/day	Heap File
D_Card	8	Insert		1/day	Heap File
Org_Donations	9	Insert		1/day	Heap File
Org_Check	9	Insert		1/day	Heap File
Org_Card	9	Insert		1/day	Heap File

3.2. Discussion of storage structures for tables (Oracle 12c)

Secondary Index:

- Oracle creates primary index by default on primary key or composite primary key.
- Since, primary key of below tables is different from the search key of file organization (see task 3.1). To improve query performance, I have created Secondary Index for below 8 tables:

	Table Name	Attribute on which Secondary Index is created
1	Client_Need	SSN
2	Insurance	I_type
3	Care	T_name
4	Serve	T_name
5	Sponsor	O_name
6	Report	SSN
7	Expenses	SSN
8	Donation	SSN

- Oracle by default creates B-tree on primary index. So, these tables with B tree can be implemented in Oracle.
- I have many tables that uses dynamic hashing. Hashing can be done in oracle, but we don't have enough privileges to do hashing. So, instead used indexing by B tree.

Task 4. SQL and text files showing the creation of tables and its successful compilation

SQL file:

```
CREATE TABLE Person (  
    SSN int,  
    P_name varchar(20),  
    BirthDate date,  
    Race varchar(20),  
    Gender varchar(10),  
    Profession varchar(20),  
    MailAddress varchar(20),  
    Email varchar(20),  
    HomeNumber number(10),  
    WorkNumber number(10),  
    CellNumber number(10),  
    MailingList char,  
    primary key (SSN)  
);
```

```
CREATE TABLE E_Contact (  
    SSN int,  
    E_name varchar(20),  
    MailAddress varchar(20),  
    Email varchar(20),  
    HomeNumber number(10),  
    WorkNumber number(10),
```



```
    CellNumber number(10),  
    Relation varchar(20),  
    foreign key (SSN) references Person on delete cascade,  
    primary key (SSN,E_name,email)  
);
```

```
CREATE TABLE Ext_Organization (  
    O_name varchar(20),  
    Mailing_Address varchar(20),  
    ContactPerson varchar(20),  
    PhoneNumber number(10),  
    Anonymous char,  
    primary key (O_name)  
);
```

```
CREATE TABLE Affiliated (  
    SSN int,  
    O_name varchar(20),  
    foreign key (O_name) references Ext_Organization on delete cascade,  
    foreign key (SSN) references Person on delete cascade,  
    primary key (SSN)  
);
```

```
CREATE TABLE Church (  
    O_name varchar(20),  
    Religious_Affiliation varchar(20),  
    foreign key (O_name) references Ext_Organization on delete cascade,  
    primary key (O_name)  
);
```

```
CREATE TABLE Business (  
    O_name varchar(20),  
    B_type varchar(20),  
    B_size int,  
    Company_website varchar(30),  
    foreign key (O_name) references Ext_Organization on delete cascade,  
    primary key (O_name)  
);
```

```
CREATE TABLE Client (  
    SSN int,  
    Doctor_Name varchar(20),  
    Doctor_Number number(10),  
    Attorney_Name varchar(20),  
    Attorney_Number number(10),  
    Date_Assigned date,  
    foreign key (SSN) references person on delete cascade,  
    primary key (SSN)  
);
```

```
CREATE TABLE Client_Need (  
    SSN int,  
    Need varchar(20),  
    N_value int,  
    foreign key (SSN) references Client on delete cascade,  
    primary key (SSN,Need)  
);
```

```
CREATE TABLE Volunteer (  
    SSN int,  
    Date_Joined date,  
    Recent_Date date,  
    Recent_Location varchar(20),  
    foreign key (SSN) references person on delete cascade,  
    primary key (SSN)  
);
```

```
CREATE TABLE Employee (  
    SSN int,  
    Salary number(10,2),  
    Marital_Status varchar(12),  
    HireDate date,  
    foreign key (SSN) references person on delete cascade,  
    primary key (SSN)  
);
```

```
CREATE TABLE Donor (  
    SSN int,  
    Anonymous char,  
    foreign key (SSN) references person on delete cascade,  
    primary key (SSN)  
);
```

```
CREATE TABLE Insurance (  
    Policy_ID varchar(20),  
    SSN int,  
    Provider_ID varchar(20),
```

```
ProviderAddress varchar(20),  
I_type varchar(10),  
foreign key (SSN) references Client on delete cascade,  
primary key (Policy_ID)  
);
```

```
CREATE TABLE Team (  
    T_name varchar(20),  
    T_type varchar(20),  
    DateFormed date,  
    primary key (T_name)  
);
```

```
CREATE TABLE Care (  
    SSN int,  
    T_name varchar(20),  
    Active char,  
    foreign key (SSN) references Client on delete cascade,  
    foreign key (T_name) references Team on delete cascade,  
    primary key (SSN,T_name)  
);
```

```
CREATE TABLE Serve (  
    SSN int,  
    T_name varchar(20),  
    S_month int,  
    No_of_hours int,  
    Active char,  
    foreign key (SSN) references volunteer on delete cascade,
```

```
foreign key (T_name) references Team on delete cascade,  
primary key (SSN,T_name,S_month)  
);
```

```
CREATE TABLE Team_Lead (  
    T_name varchar(20),  
    SSN int,  
    foreign key (SSN) references volunteer on delete cascade,  
    foreign key (T_name) references Team on delete cascade,  
    primary key (T_name)  
);
```

```
CREATE TABLE Sponsor (  
    O_name varchar(20),  
    T_name varchar(20),  
    foreign key (O_name) references Ext_Organization on delete cascade,  
    foreign key (T_name) references Team on delete cascade,  
    primary key (O_name,T_name)  
);
```

```
CREATE TABLE Report (  
    T_name varchar(20),  
    SSN int,  
    R_date date,  
    R_description varchar(50),  
    foreign key (SSN) references Employee on delete cascade,  
    foreign key (T_name) references Team on delete cascade,  
    primary key (T_name)  
);
```

```
CREATE TABLE Expenses (  
    SSN int,  
    E_date date,  
    Amount number(10,2),  
    E_description varchar(50),  
    foreign key (SSN) references Employee on delete cascade,  
    primary key (SSN,E_date,Amount,E_description)  
);
```

```
CREATE TABLE Donations (  
    SSN int,  
    D_date date,  
    Amount number(10,2),  
    D_type varchar(12),  
    Campaign varchar(20),  
    foreign key (SSN) references Donor on delete cascade,  
    primary key (SSN,D_date,Amount,D_type)  
);
```

```
CREATE TABLE D_Check (  
    SSN int,  
    D_date date,  
    Amount number (10,2),  
    D_type varchar(12),  
    Check_No varchar(10),  
    foreign key (SSN,D_date,Amount,D_type) references Donations on delete cascade,  
    primary key (SSN,D_date,Amount,D_type,Check_No)  
);
```

```

CREATE TABLE D_Card (
    SSN int,
    D_date date,
    Amount number(10,2),
    D_type varchar(12),
    Card_No varchar(20),
    Card_Type varchar(15),
    Exp_Date date,
    foreign key (SSN,D_date,Amount,D_type) references Donations on delete cascade,
    primary key (SSN,D_date,Amount,D_type,Card_No)
);

```

```

CREATE TABLE Org_Donations (
    O_name varchar(20),
    OD_date date,
    Amount number(10,2),
    OD_type varchar(12),
    Campaign varchar(20),
    foreign key (O_name) references Ext_Organization on delete cascade,
    primary key (O_name,OD_date,Amount,OD_type)
);

```

```

CREATE TABLE Org_Check (
    O_name varchar(20),
    OD_date date,
    Amount number(10,2),
    OD_type varchar(12),
    Check_No varchar(10),

```

```
foreign key (O_name,OD_date,Amount,OD_type) references Org_Donations on delete cascade,  
primary key (O_name,OD_date,Amount,OD_type,Check_No)  
);
```

```
CREATE TABLE Org_Card (  
    O_name varchar(20),  
    OD_date date,  
    Amount number(10,2),  
    OD_type varchar(12),  
    Card_No varchar(20),  
    Card_Type varchar(15),  
    Exp_Date date,  
    foreign key (O_name,OD_date,Amount,OD_type) references Org_Donations on delete cascade,  
    primary key (O_name,OD_date,Amount,OD_type,Card_No)  
);
```

```
CREATE INDEX CN_Index ON Client_Need (SSN);
```

```
CREATE INDEX I_Index ON Insurance (I_type);
```

```
CREATE INDEX C_Index ON Care (T_name);
```

```
CREATE INDEX S_Index ON Serve (T_name);
```

```
CREATE INDEX SP_Index ON Sponsor (O_name);
```

```
CREATE INDEX R_Index ON Report (SSN);
```

```
CREATE INDEX E_Index ON Expenses (SSN);
```

```
CREATE INDEX D_Index ON Donations (SSN);
```


Text files showing the creation of tables and its successful compilation

Table PERSON created.

Table E_CONTACT created.

Table EXT_ORGANIZATION created.

Table AFFILIATED created.

Table CHURCH created.

Table BUSINESS created.

Table CLIENT created.

Table CLIENT_NEED created.

Table VOLUNTEER created.

Table EMPLOYEE created.

Table DONOR created.

Table INSURANCE created.

Table TEAM created.

Table CARE created.

Table SERVE created.

Table TEAM_LEAD created.

Table SPONSOR created.

Table REPORT created.

Table EXPENSES created.

Table DONATIONS created.

Table D_CHECK created.

Table D_CARD created.

Table ORG_DONATIONS created.

Table ORG_CHECK created.

Table ORG_CARD created.

Index CN_INDEX created.

Index I_INDEX created.

Index C_INDEX created.

Index S_INDEX created.

Index SP_INDEX created.

Index R_INDEX created.

Index E_INDEX created.

Index D_INDEX created.

Task 5. Script file showing the entire Java program and its successful compilation

```
package kanneganti;

import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.File;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import java.sql.*;
import java.util.*;

public class Saiteja {

    public static Scanner scan = new Scanner(System.in);
    private static Connection dbConnection;
    private static Statement stmt;

    // to connect to database
    public static void initdb() {
        try {
            Class.forName("oracle.jdbc.OracleDriver");
        } catch (Exception x){
            System.out.println( "Unable to load the driver class!" );
        }
        try{
```

```

        dbConnection = DriverManager.getConnection
("jdbc:oracle:thin:@//oracle.cs.ou.edu:1521/pdborcl.cs.ou.edu", " kann4040 ", " DGkw3Jp4 ");

        stmt = dbConnection.createStatement();

    }

    catch(Exception e) {

        System.out.println (e.getMessage());

        System.out.println ("Exception occurred in executing the statement");

    }

}

// to take user input
public static String getInput(String prompt) {

    System.out.println(prompt);

    return scan.nextLine();

}

// to prompt user input
public static void main(String[] args){

    initdb();

    boolean shouldQuit = false;

    String bigPrompt = "-----\n"
+
        " WELCOME TO THE DATABASE OF PAN\n" +
        "-----\n" +
        "Please Enter your option(1-20):\n" +
        "1. Enter a new team into the database \n" +
        "2. Enter a new client into the database and associate him or her with one or
more teams \n" +
        "3. Enter a new volunteer into the database and associate him or her with one
or more teams \n" +
        "4. Enter the number of hours a volunteer worked this month for a particular
team \n" +

```

or more teams \n" +

"6. Enter an expense charged by an employee \n" +

"7. Enter a new organization and associate it to one or more PAN teams \n" +

"8. Enter a new donor and associate him or her with several donations \n" +

"9. Enter a new organization and associate it with several donations \n" +

"10. Retrieve the name and phone number of the doctor of a particular client
\n" +

"11. Retrieve the total amount of expenses charged by each employee for a
particular period of time. The list should be sorted by the total amount of expenses \n" +

"12. Retrieve the list of volunteers that are members of teams that support a
particular client \n" +

"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 \n" +

"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 \n" +

"15. For each team, retrieve the name and associated contact information of
the volunteer that has worked the most total hours between March and June \n" +

"16. Increase the salary by 10% of all employees to whom more than one team
must report \n" +

"17. Delete all clients who do not have health insurance and whose value of
importance for transportation is less than 5 \n" +

"18. Import: Enter new teams from a data file until the file is empty (the user
should be asked to enter the input file name) \n" +

"19. Export: Retrieve names and mailing addresses of all people on the mailing
list and output them to a data file instead of screen (the user should be asked to enter the output file
name) \n" +

"20. Quit \n" +

"\nPlease take care. The System is CASE-SENSITIVE\n";

while(!shouldQuit)

{

String inp = getInput(bigPrompt);

```
int input = -1;
try {
    input = Integer.parseInt(inp.trim());
}
catch(Exception e) {}
    switch(input) {
    case 1:
        option1();
        break;
    case 2:
        option2();
        break;
    case 3:
        option3();
        break;
    case 4:
        option4();
        break;
    case 5:
        option5();
        break;
    case 6:
        option6();
        break;
    case 7:
        option7();
        break;
    case 8:
        option8();
```



```
        break;
case 9:
    option9();
    break;
case 10:
    option10();
    break;
case 11:
    option11();
    break;
case 12:
    option12();
    break;
case 13:
    option13();
    break;
case 14:
    option14();
    break;
case 15:
    option15();
    break;
case 16:
    option16();
    break;
case 17:
    option17();
    break;
case 18:
```

```

        option18();
        break;
    case 19:
        option19();
        break;
    case 20:
        shouldQuit = true;
        break;
    default:
        System.out.println("Sorry, Unrecognized input");
        break;
    }
}

System.out.println("Thank You for using the Program");
}

// function to take date from the user and convert to date format
public static String getDateSQL() {
    String month = getInput("month(mm):");
    String day = getInput("day(dd):");
    String year = getInput("year(yyyy):");
    String dateString = "TO_DATE('" + month + "-" + day + "-" + year + "', 'MM-DD-YYYY)";
    return dateString;
}

public static void option1() {
    String T_name = getInput("Enter Team name");
    String T_type = getInput("Enter Team type: Emergency/NonEmergency");
    System.out.println("Enter the date when team was formed");
}

```

```

String DateFormed = getDateSQL();

// inserting tuple into Team table

String sql1 = "Insert into Team values ('"+T_name+"','"+T_type+"','"+DateFormed+"')";

// select team table

String sql2 = "select * from Team";

try {
    stmt.executeQuery(sql1);

    ResultSet rs = stmt.executeQuery(sql2);

    System.out.println("T_name | T_type | DateFormed"); // printing columns in
team table

    while(rs.next()) {
        // printing team table

        System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getDate(3).toString());
    }

} catch(SQLException e) {
    e.printStackTrace();
}

}

//Select all from Book Table

public static void option2() {
    // select person table

    String sqlp = "SELECT * FROM Person";

    try {

        ResultSet rsp = stmt.executeQuery(sqlp);

        // Printing column names in person table

        System.out.println("SSN | P_name | BirthDate | Race | Gender | Profession |
MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

        while(rsp.next()) {

```

```

        // printing person table

        System.out.println(rsp.getInt(1) + "|" + rsp.getString(2) + "|" +
rsp.getDate(3).toString() + "|" + rsp.getString(4) + "|" + rsp.getString(5) + "|" + rsp.getString(6) + "|" +
rsp.getString(7) + "|" + rsp.getString(8) + "|" + rsp.getInt(9) + "|" + rsp.getInt(10) + "|" + rsp.getInt(11) + "|" +
rsp.getString(12).charAt(0));

    }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    String coptionc = getInput("Enter 1 if client you are entering is a person in database or
Enter 2 if client is not in the database ");

    int optionc = Integer.parseInt(coptionc.trim());

    // If client is already in database
    if (optionc == 1) {

        String cSSN = getInput("Enter SSN of Client");

        int SSN = Integer.parseInt(cSSN.trim());

        String Doctor_Name = getInput("Enter Doctor Name of Client");

        String cDoctor_Number = getInput("Enter Doctor Number of Client");

        int Doctor_Number = Integer.parseInt(cDoctor_Number.trim());

        String Attorney_Name = getInput("Enter Attorney Name of Client");

        String cAttorney_Number = getInput("Enter Attorney Number of Client");

        int Attorney_Number = Integer.parseInt(cAttorney_Number.trim());

        System.out.println("Enter the date when client was assigned to organization");

        String Date_Assigned = getDateSQL();

        //To insert tuple into client

        String sql5 = "Insert into Client values
("+SSN+", '"+Doctor_Name+"', '"+Doctor_Number+"', '"+Attorney_Name+"', '"+Attorney_Number+"', '"+Date
_Assigned+"')";

```

```

        // selecting client table

        String sql6 = "SELECT * FROM Client";

        try {
            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            // Printing columns in client table

            System.out.println("SSN | Doctor_Name | Doctor_Number |
Attorney_Name | Attorney_Number | Date_Assigned");

            while(rs2.next()) {

                // Printing client table

                System.out.println(rs2.getInt(1) + "|" + rs2.getString(2) + "|" +
rs2.getInt(3) + "|" + rs2.getString(4) + "|" + rs2.getInt(5) + "|" + rs2.getDate(6).toString());

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

        String cNT = getInput("Enter Number of Teams this client is associated with");

        // variable for Number of teams

        int NT = Integer.parseInt(cNT.trim());

        // for loop runs NT(No of teams) times

        for(int j=0;j<NT;j= j+1)

        {

            String T_name = getInput("Enter Team name client is associated with:");

            String cActive = getInput("Enter Y if client is Active in this team or else
enter N");

            // converting string to character

            char Active = cActive.charAt(0);

            // Inserting tuple into care table

```

```

        String sql7 = "Insert into Care values
("+SSN+", '"+T_name+"', '"+Active+"')";

        try {

            stmt.executeQuery(sql7);

        }

        catch(SQLException e) {

            e.printStackTrace();

        }

    }

    // selecting care table

    String sql8 = "SELECT * FROM Care";

    try {

        // result of execution of sql8 is stored in rs3

        ResultSet rs3 = stmt.executeQuery(sql8);

        // print columns in care table

        System.out.println("SSN | T_Name | Active");

        while(rs3.next()) {

            // prints care table

            System.out.println(rs3.getInt(1) + "|" + rs3.getString(2) + "|" +
rs3.getString(3).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    // variable for Number of needs

    String cNN = getInput("Enter Number of needs client has");

    // converting string to integer

    int NN = Integer.parseInt(cNN.trim());

    // for loop iterates NN(No of needs) times

```

```

for(int K=0;K<NN;K= K+1)
{
    String Need = getInput("Enter a Need of client");
    String cN_value = getInput("Enter value associated with this need");
    // converting string to integer
    int N_value = Integer.parseInt(cN_value.trim());
    // insert tuple into Client_Need table
    String sql9 = "Insert into Client_Need values
("+SSN+", ""+Need+", "+N_value+)";
    try {
        stmt.executeQuery(sql9);
    }
    catch(SQLException e) {
        e.printStackTrace();
    }
}

// select clientNeed table as a string
String sql10 = "SELECT * FROM Client_Need";
try {
    ResultSet rs4 = stmt.executeQuery(sql10);
    // To display columns in ClientNeed
    System.out.println("SSN | Need | Value");
    while(rs4.next()) {
        // To print ClientNeed table
        System.out.println(rs4.getInt(1) + "|" + rs4.getString(2) + "|" +
rs4.getInt(3));
    }
} catch(SQLException e) {
    e.printStackTrace();
}

```

```

    }

    // variable for number of insurance policies client has
    String cNI = getInput("Enter Number of Insurance Policies client has");

    // converting string to integer
    int NI = Integer.parseInt(cNI.trim());

    // for loop iterates NI times (Number of Insurance policies)
    for(int l=0;l<NI;l= l+1)
    {

        String Policy_ID = getInput("Enter a Policy_ID");
        String Provider_ID = getInput("Enter a Provider_ID");
        String ProviderAddress = getInput("Enter Provider Address");
        String l_type = getInput("Enter insurance type");

        // inserting tuple into Insurance
        String sql11 = "Insert into Insurance values
('"+Policy_ID+"','"+SSN+"','"+Provider_ID+"','"+ProviderAddress+"','"+l_type+"')";

        try {
            stmt.executeQuery(sql11);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // selecting insurance table as string
    String sql12 = "SELECT * FROM Insurance";

    try {
        ResultSet rs5 = stmt.executeQuery(sql12);

        // to print attributes in insurance table
        System.out.println("Policy_ID | SSN | Provider_ID | ProviderAddress |
l_type");
    }

```



```

        while(rs5.next()) {

            // to print insurance table

            System.out.println(rs5.getString(1) + "|" + rs5.getInt(2) + "|" +
rs5.getString(3) + "|" + rs5.getString(4)+ "|" + rs5.getString(5));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

else {

    String cSSN = getInput("Enter SSN of Client");
    int SSN = Integer.parseInt(cSSN.trim());

    String P_name = getInput("Enter name of Client");
    System.out.println("Enter the date of birth of client");
    String BirthDate = getDateSQL();

    String Race = getInput("Enter Race of Client");

    String Gender = getInput("Enter Gender of Client: Male/Female");

    String Profession = getInput("Enter profession of Client");

    String MailAddress = getInput("Enter MailAddress of Client");

    String Email = getInput("Enter Email of Client");

    String cHomeNumber = getInput("Enter HomeNumber of Client");

    int HomeNumber = Integer.parseInt(cHomeNumber.trim());

    String cWorkNumber = getInput("Enter WorkNumber of Client");

    int WorkNumber = Integer.parseInt(cWorkNumber.trim());

    String cCellNumber = getInput("Enter CellNumber of Client");

    int CellNumber = Integer.parseInt(cCellNumber.trim());

    String cMailingList = getInput("Enter Y if client is in mailing list or else enter N");

    char MailingList = cMailingList.charAt(0);

    // insert tuple into person table

```

```

        String sql1 = "Insert into Person values
("+SSN+", "+P_name+", "+BirthDate+", "+Race+", "+Gender+", "+Profession+", "+MailAddress+", "+Em
ail+", "+HomeNumber+", "+WorkNumber+", "+CellNumber+", "+MailingList+)";

        // selecting person table as string

        String sql2 = "SELECT * FROM Person";

        try {
            stmt.executeQuery(sql1);

            ResultSet rs = stmt.executeQuery(sql2);

            // print columns in person table

            System.out.println("SSN | P_name | BirthDate | Race | Gender |
Profession | MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

            while(rs.next()) {

                // printing values of person table on screen

                System.out.println(rs.getInt(1) + "|" + rs.getString(2) + "|" +
rs.getDate(3).toString() + "|" + rs.getString(4) + "|" + rs.getString(5) + "|" + rs.getString(6) + "|" +
rs.getString(7) + "|" + rs.getString(8) + "|" + rs.getInt(9) + "|" + rs.getInt(10) + "|" + rs.getInt(11) + "|" +
rs.getString(12).charAt(0));

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

        // variable representing number of emergency contacts

        String cNEC = getInput("Enter Number of Emergency Contacts this person
has:");

        // converting string to integer

        int NEC = Integer.parseInt(cNEC.trim());

        // for loop iterates NEC(Number of emergency contacts) times

        for(int j=0;j<NEC;j= j+1)

        {

            String EE_name = getInput("Enter name of Emergency contact");

```

```

        String EMailAddress = getInput("Enter MailAddress of Emergency
contact");

        String EEmail = getInput("Enter Email of Emergency contact");

        String cEHomeNumber = getInput("Enter HomeNumber of Emergency
contact");

        int EHomeNumber = Integer.parseInt(cEHomeNumber.trim());

        String cEWorkNumber = getInput("Enter WorkNumber of Emergency
contact");

        int EWorkNumber = Integer.parseInt(cEWorkNumber.trim());

        String cECellNumber = getInput("Enter CellNumber of Emergency
contact");

        int ECellNumber = Integer.parseInt(cECellNumber.trim());

        String ERelation = getInput("Enter Relation of Emergency contact");

        // to insert a tuple in E_Contact table

        String sqlEC1 = "Insert into E_Contact values
("+SSN+", "+EE_name+", "+EMailAddress+", "+EEmail+", "+EHomeNumber+", "+EWorkNumber+", "+ECel
lNumber+", "+ERelation+"");

        try {

            stmt.executeQuery(sqlEC1);

        }

        catch(SQLException e) {

            e.printStackTrace();

        }

    }

    // selecting contents of E_Contact as string

    String sqlEC2 = "SELECT * FROM E_Contact";

    try {

        ResultSet rsEC = stmt.executeQuery(sqlEC2);

        // displaying columns of E_Contact on screen

        System.out.println("SSN | Emer. Contact Name | Mail Address | Email |
Home Number | Work Number | Cell Number | Relation");

```

```

        while(rsEC.next()) {

            System.out.println(rsEC.getInt(1) + "|" + rsEC.getString(2) + "|"
+ rsEC.getString(3) + "|" + rsEC.getString(4) + "|" + rsEC.getInt(5) + "|" + rsEC.getInt(6) + "|" +
rsEC.getInt(7) + "|" + rsEC.getString(8) );

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    // taking client values as user input

    String Doctor_Name = getInput("Enter Doctor Name of Client");
    String cDoctor_Number = getInput("Enter Doctor Number of Client");
    int Doctor_Number = Integer.parseInt(cDoctor_Number.trim());
    String Attorney_Name = getInput("Enter Attorney Name of Client");
    String cAttorney_Number = getInput("Enter Attorney Number of Client");
    int Attorney_Number = Integer.parseInt(cAttorney_Number.trim());
    System.out.println("Enter the date when client was assigned to organization");

    String Date_Assigned = getDateSQL();

    // insert a tuple into client table

    String sql5 = "Insert into Client values
("+SSN+", '"+Doctor_Name+"', '"+Doctor_Number+"', '"+Attorney_Name+"', '"+Attorney_Number+"', '"+Date
_Assigned+"')";

    // select contents of client table as a string

    String sql6 = "SELECT * FROM Client";

    try {

        stmt.executeQuery(sql5);

        ResultSet rs2 = stmt.executeQuery(sql6);

        // to display columns of client table

        System.out.println("SSN | Doctor_Name | Doctor_Number |
Attorney_Name | Attorney_Number | Date_Assigned");

```

```

        while(rs2.next()) {

            // to display values of client table

            System.out.println(rs2.getInt(1) + "|" + rs2.getString(2) + "|" +
rs2.getInt(3) + "|" + rs2.getString(4) + "|" + rs2.getInt(5) + "|" + rs2.getDate(6).toString());

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    // variable to store number of teams

    String cNT = getInput("Enter Number of Teams this client is associated with");

    // convert string to integer

    int NT = Integer.parseInt(cNT.trim());

    // for loop iterates NT(No of teams) times

    for(int j=0;j<NT;j= j+1)

    {

        String T_name = getInput("Enter Team name client is associated with:");

        String cActive = getInput("Enter Y if client is Active in this team or else

enter N");

        char Active = cActive.charAt(0);

        // insert a tuple into Care

        String sql7 = "Insert into Care values

("+SSN+", "+T_name+", "+Active+")";

        try {

            stmt.executeQuery(sql7);

        }

        catch(SQLException e) {

            e.printStackTrace();

        }

    }

    // to select content of care as string

```

```

        String sql8 = "SELECT * FROM Care";
        try {
            ResultSet rs3 = stmt.executeQuery(sql8);
            // Display columns in care
            System.out.println("SSN | T_Name | Active");
            while(rs3.next()) {
                System.out.println(rs3.getInt(1) + "|" + rs3.getString(2) + "|" +
rs3.getString(3).charAt(0));
            }
        }catch(SQLException e) {
            e.printStackTrace();
        }
        // variable to store number of needs client has
        String cNN = getInput("Enter Number of needs client has");
        int NN = Integer.parseInt(cNN.trim());
        // for loop iterates NN(No ofneeds) times
        for(int K=0;K<NN;K= K+1)
        {
            String Need = getInput("Enter a Need of client");
            String cN_value = getInput("Enter value associated with this need");
            int N_value = Integer.parseInt(cN_value.trim());
            String sql9 = "Insert into Client_Need values
("+SSN+", ""+Need+", ""+N_value+)";
            try {
                stmt.executeQuery(sql9);
            }
            catch(SQLException e) {
                e.printStackTrace();
            }
        }
    }
}

```

```

    }

    // select values in Client_Need as string
    String sql10 = "SELECT * FROM Client_Need";

    try {
        ResultSet rs4 = stmt.executeQuery(sql10);

        // displaying columns in Client_Need table
        System.out.println("SSN | Need | Value");
        while(rs4.next()) {
            System.out.println(rs4.getInt(1) + "|" + rs4.getString(2) + "|" +
rs4.getInt(3));
        }
    } catch(SQLException e) {
        e.printStackTrace();
    }

    // variable to represent number of insurance policies
    String cNI = getInput("Enter Number of Insurance Policies client has");
    int NI = Integer.parseInt(cNI.trim());

    // for loop iterates NI times
    for(int l=0;l<NI;l= l+1)
    {
        String Policy_ID = getInput("Enter a Policy_ID");
        String Provider_ID = getInput("Enter a Provider_ID");
        String ProviderAddress = getInput("Enter Provider Address");
        String l_type = getInput("Enter insurance type");

        String sql11 = "Insert into Insurance values
('"+Policy_ID+"','"+SSN+"','"+Provider_ID+"','"+ProviderAddress+"','"+l_type+"')";

        try {
            stmt.executeQuery(sql11);
        }
    }

```

```

        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // select contents of Insurance as string
    String sql12 = "SELECT * FROM Insurance";
    try {
        ResultSet rs5 = stmt.executeQuery(sql12);
        // displaying columns in Insurane
        System.out.println("Policy_ID | SSN | Provider_ID | ProviderAddress |
l_type");

        while(rs5.next()) {
            System.out.println(rs5.getString(1) + "|" + rs5.getInt(2) + "|" +
rs5.getString(3) + "|" + rs5.getString(4)+ "|" + rs5.getString(5));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }
}
}

```

```

public static void option3() {
    // select contents of person table as string
    String sqlp = "SELECT * FROM Person";

    try {
        ResultSet rsp = stmt.executeQuery(sqlp);
        //display column names in person
    }
}

```



```

        System.out.println("SSN | P_name | BirthDate | Race | Gender | Profession |
MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

        while(rsp.next()) {

            System.out.println(rsp.getInt(1) + "|" + rsp.getString(2) + "|" +
rsp.getDate(3).toString() + "|" + rsp.getString(4) + "|" + rsp.getString(5) + "|" + rsp.getString(6) + "|" +
rsp.getString(7) + "|" + rsp.getString(8) + "|" + rsp.getInt(9) + "|" + rsp.getInt(10) + "|" + rsp.getInt(11) + "|" +
rsp.getString(12).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

```

```

String coptionv = getInput("Enter 1 if volunteer you are entering is a person in database
or Enter 2 if volunteer is not in the database ");

```

```

int optionv = Integer.parseInt(coptionv.trim());

```

```

// if volunteer is existing in database

```

```

if (optionv == 1) {

```

```

    String cSSN = getInput("Enter SSN of volunteer");

```

```

    int SSN = Integer.parseInt(cSSN.trim());

```

```

    System.out.println("Enter the date when volunteer joined PAN");

```

```

    String Date_Joined = getDateSQL();

```

```

    System.out.println("Enter the recent training date of volunteer");

```

```

    String Recent_Date = getDateSQL();

```

```

    String Recent_Location = getInput("Enter Recent training location of
volunteer");

```

```

    // inserting a tuple in volunteer

```

```

    String sql5 = "Insert into Volunteer values
("+SSN+", "+Date_Joined+", "+Recent_Date+", "+Recent_Location+"");

```

```

    // selecting contents of volunteer as string

```

```

    String sql6 = "SELECT * FROM Volunteer";

```

```

        try {
            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            // To display columns in volunteer table
            System.out.println("SSN | Date_Joined | Recent Training Date | Recent
Training Location");

            while(rs2.next()) {

                System.out.println(rs2.getInt(1) + "|" +
rs2.getDate(2).toString() + "|" + rs2.getDate(3).toString() + "|" + rs2.getString(4));

            }

        } catch (SQLException e) {

            e.printStackTrace();

        }

        // variable to represent number of teams
        String cNT = getInput("Enter Number of Teams this volunteer is associated
with");

        int NT = Integer.parseInt(cNT.trim());

        // for loop iterates NT (Number of teams) times
        for (int j=0; j<NT; j=j+1)
        {

            String T_name = getInput("Enter Team name volunteer is associated
with:");

            String cS_month = getInput("Enter Month in integer: 1 for January, 2 for
February,...12 for December");

            int S_month = Integer.parseInt(cS_month.trim());

            String cNo_of_hours = getInput("Enter Number of hours volunteer
worked");

            int No_of_hours = Integer.parseInt(cNo_of_hours.trim());

            String cActive = getInput("Enter Y if volunteer is Active in this team or
else enter N");

            char Active = cActive.charAt(0);

```

```

        // insert a tuple into serve table

        String sql7 = "Insert into Serve values
("+SSN+", ""+T_name+", ""+S_month+", ""+No_of_hours+", ""+Active+"");

        try {
            stmt.executeQuery(sql7);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // to select contents of serve table

    String sql8 = "SELECT * FROM Serve";
    try {
        ResultSet rs3 = stmt.executeQuery(sql8);

        // to display columns in serve table

        System.out.println("SSN | T_Name | Month | No of hours | Active");
        while(rs3.next()) {
            System.out.println(rs3.getInt(1) + "|" + rs3.getString(2) + "|" +
rs3.getInt(3) + "|" + rs3.getInt(4) + "|" + rs3.getString(5).charAt(0));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

}

// if volunteer you are entering is not in database
else {
    String cSSN = getInput("Enter SSN of volunteer");
    int SSN = Integer.parseInt(cSSN.trim());

```

```

String P_name = getInput("Enter name of volunteer");
System.out.println("Enter the date of birth of volunteer");
String BirthDate = getDateSQL();
String Race = getInput("Enter Race of volunteer");
String Gender = getInput("Enter Gender of volunteer: Male/Female");
String Profession = getInput("Enter profession of volunteer");
String MailAddress = getInput("Enter MailAddress of volunteer");
String Email = getInput("Enter Email of volunteer");
String cHomeNumber = getInput("Enter HomeNumber of volunteer");
int HomeNumber = Integer.parseInt(cHomeNumber.trim());
String cWorkNumber = getInput("Enter WorkNumber of volunteer");
int WorkNumber = Integer.parseInt(cWorkNumber.trim());
String cCellNumber = getInput("Enter CellNumber of volunteer");
int CellNumber = Integer.parseInt(cCellNumber.trim());
String cMailingList = getInput("Enter Y if volunteer is in mailing list or else enter
N");

char MailingList = cMailingList.charAt(0);

// insert a tuple into person

String sql1 = "Insert into Person values
("+SSN+", "+P_name+", "+BirthDate+", "+Race+", "+Gender+", "+Profession+", "+MailAddress+", "+Em
ail+", "+HomeNumber+", "+WorkNumber+", "+CellNumber+", "+MailingList+")";

String sql2 = "SELECT * FROM Person";

try {
stmt.executeQuery(sql1);

ResultSet rs = stmt.executeQuery(sql2);

// to print columns in person table

System.out.println("SSN | P_name | BirthDate | Race | Gender |
Profession | MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

while(rs.next()) {

```

```

        // to display content/values in person table
        System.out.println(rs.getInt(1) + "|" + rs.getString(2) + "|" +
rs.getDate(3).toString() + "|" + rs.getString(4) + "|" + rs.getString(5) + "|" + rs.getString(6) + "|" +
rs.getString(7) + "|" + rs.getString(8) + "|" + rs.getInt(9) + "|" + rs.getInt(10) + "|" + rs.getInt(11) + "|" +
rs.getString(12).charAt(0));

    }

    }catch(SQLException e) {
        e.printStackTrace();
    }

    // variable that represents number of emergency contacts
    String cNEC = getInput("Enter Number of Emergency Contacts this person
has:");

    int NEC = Integer.parseInt(cNEC.trim());

    // for loop iterates NEC(Number of Emergency contacts) times
    for(int j=0;j<NEC;j= j+1)
    {
        String EE_name = getInput("Enter name of Emergency contact");
        String EMailAddress = getInput("Enter MailAddress of Emergency
contact");

        String EEmail = getInput("Enter Email of Emergency contact");

        String cEHomeNumber = getInput("Enter HomeNumber of Emergency
contact");

        int EHomeNumber = Integer.parseInt(cEHomeNumber.trim());

        String cEWorkNumber = getInput("Enter WorkNumber of Emergency
contact");

        int EWorkNumber = Integer.parseInt(cEWorkNumber.trim());

        String cECellNumber = getInput("Enter CellNumber of Emergency
contact");

        int ECellNumber = Integer.parseInt(cECellNumber.trim());

        String ERelation = getInput("Enter Relation of Emergency contact");

        // inserting a tuple into emergency contacts

```

```

        String sqlEC1 = "Insert into E_Contact values
("+SSN+", '"+EE_name+"', '"+EMailAddress+"', '"+EEmail+"', '"+EHomeNumber+"', '"+EWorkNumber+"', '"+ECel
lNumber+"', '"+ERelation+"')";

        try {

            stmt.executeQuery(sqlEC1);

        }

        catch(SQLException e) {

            e.printStackTrace();

        }

    }

    // select content/values from E_Contact table

    String sqlEC2 = "SELECT * FROM E_Contact";

    try {

        ResultSet rsEC = stmt.executeQuery(sqlEC2);

        // to display columns of person

        System.out.println("SSN | Emer. Contact Name | Mail Address | Email |
Home Number | Work Number | Cell Number | Relation");

        while(rsEC.next()) {

            System.out.println(rsEC.getInt(1) + "|" + rsEC.getString(2) + "|"
+ rsEC.getString(3) + "|" + rsEC.getString(4) + "|" + rsEC.getInt(5) + "|" + rsEC.getInt(6) + "|" +
rsEC.getInt(7) + "|" + rsEC.getString(8) );

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    System.out.println("Enter the date when volunteer joined PAN");

    // getDateSQL() function is called to take date as user input and convert to SQL
dataframe

    String Date_Joined = getDateSQL();

```

```

        System.out.println("Enter the recent training date of volunteer");

        String Recent_Date = getDateSQL();

        String Recent_Location = getInput("Enter Recent training location of
volunteer");

        // insert a tuple into volunteer table

        String sql5 = "Insert into Volunteer values
("+SSN+", "+Date_Joined+", "+Recent_Date+", "+Recent_Location+"");

        // select content/values of volunteer

        String sql6 = "SELECT * FROM Volunteer";

        try {
            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            System.out.println("SSN | Date_Joined | Recent Training Date | Recent
Training Location");

            while(rs2.next()) {

                System.out.println(rs2.getInt(1) + " | " +
rs2.getDate(2).toString() + " | " + rs2.getDate(3).toString() + " | " + rs2.getString(4));

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

        // variable that represents number of teams

        String cNT = getInput("Enter Number of Teams this volunteer is associated
with");

        int NT = Integer.parseInt(cNT.trim());

        // for loop iterates NT(Number of team) times

        for(int j=0; j<NT; j= j+1)

        {

            String T_name = getInput("Enter Team name volunteer is associated
with:");

```

```

String cS_month = getInput("Enter Month as integer: 1 for January, 2 for
February,...12 for December");

int S_month = Integer.parseInt(cS_month.trim());

String cNo_of_hours = getInput("Enter Number of hours volunteer
worked");

int No_of_hours = Integer.parseInt(cNo_of_hours.trim());

String cActive = getInput("Enter Y if volunteer is Active in this team or
else enter N");

char Active = cActive.charAt(0);

// inserting a tuple into serve table

String sql7 = "Insert into Serve values
("+SSN+", '"+T_name+"', '"+S_month+"', '"+No_of_hours+"', '"+Active+"'");

try {
    stmt.executeQuery(sql7);
}
catch(SQLException e) {
    e.printStackTrace();
}

}

// select content/values of serve as string

String sql8 = "SELECT * FROM Serve";

try {
    ResultSet rs3 = stmt.executeQuery(sql8);

    // to display columns in serve table

    System.out.println("SSN | T_Name | Month | No of hours | Active");

    while(rs3.next()) {

        // to print values of serve on screen

        System.out.println(rs3.getInt(1) + "|" + rs3.getString(2) + "|" +
rs3.getInt(3) + "|" + rs3.getInt(4) + "|" + rs3.getString(5).charAt(0));

    }
}

```



```

        }catch(SQLException e) {
            e.printStackTrace();
        }
    }

}

public static void option4() {
    String cSSN = getInput("Enter SSN of volunteer");
    int SSN = Integer.parseInt(cSSN.trim());

    // variable representing number of teams associated with volunteers
    String cNT = getInput("Enter Number of Teams this volunteer is associated with");
    int NT = Integer.parseInt(cNT.trim());

    // for loop iterates NT(No of teams) times
    for(int j=0;j<NT;j=j+1)
    {
        String T_name = getInput("Enter Team name volunteer is associated with:");

        // Taking month as an integer
        String cS_month = getInput("Enter Month as integer: 1 for January, 2 for
February,...,12 for December");

        int S_month = Integer.parseInt(cS_month.trim());

        String cNo_of_hours = getInput("Enter Number of hours volunteer worked");

        // converting string to integer
        int No_of_hours = Integer.parseInt(cNo_of_hours.trim());

        String cActive = getInput("Enter Y if volunteer is Active in this team or else enter
N");

        // converting string to character
        char Active = cActive.charAt(0);

        // insert a tuple into serve table

```

```

        String sql1 = "Insert into Serve values
("+SSN+", ""+T_name+", ""+S_month+", ""+No_of_hours+", ""+Active+"");
        System.out.println(sql1);

        try {
            stmt.executeQuery(sql1);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // select content/ values of serve as string

    String sql2 = "SELECT * FROM Serve";
    try {
        ResultSet rs3 = stmt.executeQuery(sql2);
        // display columns in serve table

        System.out.println("SSN | T_Name | Month | No of hours | Active");
        while(rs3.next()) {
            // to display values of serve table
            System.out.println(rs3.getInt(1) + "|" + rs3.getString(2) + "|" +
rs3.getInt(3) + "|" + rs3.getInt(4) + "|" + rs3.getString(5).charAt(0));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }
}

```

```

public static void option5() {
    String sqlp = "SELECT * FROM Person";

```

```

try {

    ResultSet rsp = stmt.executeQuery(sqlp);

    // display columns in person table

    System.out.println("SSN | P_name | BirthDate | Race | Gender | Profession |
MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

    while(rsp.next()) {

        System.out.println(rsp.getInt(1) + "|" + rsp.getString(2) + "|" +
rsp.getDate(3).toString() + "|" + rsp.getString(4) + "|" + rsp.getString(5) + "|" + rsp.getString(6) + "|" +
rsp.getString(7) + "|" + rsp.getString(8) + "|" + rsp.getInt(9) + "|" + rsp.getInt(10) + "|" + rsp.getInt(11) + "|" +
rsp.getString(12).charAt(0));

    }

} catch(SQLException e) {

    e.printStackTrace();

}

String coptione = getInput("Enter 1 if Employee you are entering is a person in database
or Enter 2 if Employee is not in the database ");

int optione = Integer.parseInt(coptione.trim());

// If employee is existing in database

if (optione == 1) {

    String cSSN = getInput("Enter SSN of Employee");

    int SSN = Integer.parseInt(cSSN.trim());

    String cSalary = getInput("Enter Salary of Employee");

    int Salary = Integer.parseInt(cSalary.trim());

    String Marital_Status = getInput("Enter Marital status of employee
(single/married/separated/divorced/widowed)");

    System.out.println("Enter the Hire date of employee");

    String HireDate = getDateSQL();

    // insert a tuple into employee table

```

```

        String sql5 = "Insert into Employee values
("+SSN+", "+Salary+", "+Marital_Status+", "+HireDate+)";

        String sql6 = "SELECT * FROM Employee";

        try {
            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            // display columns in employee table
            System.out.println("SSN | Salary | Marital_Status | HireDate");

            while(rs2.next()) {

                System.out.println(rs2.getInt(1) + "|" + rs2.getInt(2) + "|" +
rs2.getString(3) + "|" +rs2.getDate(4).toString());

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

        // variable to represent number of teams employee is associated with
        String cNT = getInput("Enter Number of Teams this employee is associated
with");

        int NT = Integer.parseInt(cNT.trim());

        // for loop iterates NT(Number of teams) times
        for(int j=0;j<NT;j= j+1)
        {

            String T_name = getInput("Enter Team name Employee is associated
with:");

            System.out.println("Enter the date when team reported");

            String R_date = getDateSQL();

            String R_description = getInput("Enter description of Report");

            // insert a tuple in Report table

```

```

        String sql7 = "Insert into Report values
('"+T_name+"','"+SSN+"','"+R_date+"','"+R_description+"')";

        try {

            stmt.executeQuery(sql7);

        }

        catch(SQLException e) {

            e.printStackTrace();

        }

    }

    String sql8 = "SELECT * FROM Report";

    try {

ResultSet rs3 = stmt.executeQuery(sql8);

// display columns in report table

        System.out.println("Team Name | SSN | Report Date | Report
Description");

        while(rs3.next()) {

            System.out.println(rs3.getString(1) + "|" + rs3.getInt(2) + "|" +
rs3.getDate(3).toString() + "|" +rs3.getString(4));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

// If employee is new is database
else {

    String cSSN = getInput("Enter SSN of Employee");

    int SSN = Integer.parseInt(cSSN.trim());

    String P_name = getInput("Enter name of Employee");

```

```

        System.out.println("Enter the date of birth of Employee");
        String BirthDate = getDateSQL();
        String Race = getInput("Enter Race of Employee");
        String Gender = getInput("Enter Gender of Employee: Male/Female");
        String Profession = getInput("Enter profession of Employee");
        String MailAddress = getInput("Enter MailAddress of Employee");
        String Email = getInput("Enter Email of Employee");
        String cHomeNumber = getInput("Enter HomeNumber of Employee");
        int HomeNumber = Integer.parseInt(cHomeNumber.trim());
        String cWorkNumber = getInput("Enter WorkNumber of Employee");
        int WorkNumber = Integer.parseInt(cWorkNumber.trim());
        String cCellNumber = getInput("Enter CellNumber of Employee");
        int CellNumber = Integer.parseInt(cCellNumber.trim());
        String cMailingList = getInput("Enter Y if Employee is in mailing list or else enter
N");

        char MailingList = cMailingList.charAt(0);

        // insert a tuple into person table

        String sql1 = "Insert into Person values
("+SSN+", "+P_name+", "+BirthDate+", "+Race+", "+Gender+", "+Profession+", "+MailAddress+", "+Em
ail+", "+HomeNumber+", "+WorkNumber+", "+CellNumber+", "+MailingList+")";

        String sql2 = "SELECT * FROM Person";

        try {
            stmt.executeQuery(sql1);

            ResultSet rs = stmt.executeQuery(sql2);

            System.out.println("SSN | P_name | BirthDate | Race | Gender |
Profession | MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

            while(rs.next()) {

                System.out.println(rs.getInt(1) + "|" + rs.getString(2) + "|" +
rs.getDate(3).toString() + "|" + rs.getString(4) + "|" + rs.getString(5) + "|" + rs.getString(6) + "|" +

```

```

rs.getString(7) + "|" + rs.getString(8) + "|" + rs.getInt(9) + "|" + rs.getInt(10) + "|" + rs.getInt(11) + "|" +
rs.getString(12).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    // variable to represent number of emergency contacts

    String cNEC = getInput("Enter Number of Emergency Contacts this person
has:");

    int NEC = Integer.parseInt(cNEC.trim());

    // for loop iterates NEC(Number of Emergency Contacts) times
    for(int j=0;j<NEC;j= j+1)
    {

        String EE_name = getInput("Enter name of Emergency contact");
        String EMailAddress = getInput("Enter MailAddress of Emergency
contact");

        String EEmail = getInput("Enter Email of Emergency contact");

        String cEHomeNumber = getInput("Enter HomeNumber of Emergency
contact");

        int EHomeNumber = Integer.parseInt(cEHomeNumber.trim());
        String cEWorkNumber = getInput("Enter WorkNumber of Emergency
contact");

        int EWorkNumber = Integer.parseInt(cEWorkNumber.trim());
        String cECellNumber = getInput("Enter CellNumber of Emergency
contact");

        int ECellNumber = Integer.parseInt(cECellNumber.trim());
        String ERelation = getInput("Enter Relation of Emergency contact");

        // insert a tuple into E_Contact table

        String sqlEC1 = "Insert into E_Contact values
("+SSN+", '"+EE_name+"', '"+EMailAddress+"', '"+EEmail+"', '"+EHomeNumber+"', '"+EWorkNumber+"', '"+ECellNumber+"', '"+ERelation+"'");

```

```

        try {
            stmt.executeQuery(sqlEC1);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // Select values/content of E_Contact
    String sqlEC2 = "SELECT * FROM E_Contact";
    try {
        ResultSet rsEC = stmt.executeQuery(sqlEC2);

        // prints columns in E_Contact
        System.out.println("SSN | Emer. Contact Name | Mail Address | Email |
Home Number | Work Number | Cell Number | Relation");

        while(rsEC.next()) {
            System.out.println(rsEC.getInt(1) + "|" + rsEC.getString(2) + "|"
+ rsEC.getString(3) + "|" + rsEC.getString(4) + "|" + rsEC.getInt(5) + "|" + rsEC.getInt(6) + "|" +
rsEC.getInt(7) + "|" + rsEC.getString(8) );
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

    // Taking salary as string
    String cSalary = getInput("Enter Salary of Employee");

    // converting string to integer
    int Salary = Integer.parseInt(cSalary.trim());

    String Marital_Status = getInput("Enter Marital status of employee
(single/married/separated/divorced/widowed)");

    System.out.println("Enter the Hire date of employee");

```



```

        String HireDate = getDateSQL();

        // inserting a tuple into Employees

        String sql5 = "Insert into Employee values
("+SSN+", "+Salary+", "+Marital_Status+", "+HireDate+)";

        // select content/values of employee as string

        String sql6 = "SELECT * FROM Employee";

        try {
            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            System.out.println("SSN | Salary | Marital_Status | HireDate");

            while(rs2.next()) {

                System.out.println(rs2.getInt(1) + "|" + rs2.getInt(2) + "|" +
rs2.getString(3) + "|" +rs2.getDate(4).toString());

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

        // variable representing number of teams employee is associated with

        String cNT = getInput("Enter Number of Teams this employee is associated
with");

        int NT = Integer.parseInt(cNT.trim());

        // for loop iterates NT(Number of Teams) times

        for(int j=0;j<NT;j= j+1)

        {

            String T_name = getInput("Enter Team name Employee is associated
with:");

            System.out.println("Enter the date when team reported");

            String R_date = getDateSQL();

            String R_description = getInput("Enter description of Report");

```

```

        // insert a tuple into report table

        String sql7 = "Insert into Report values
('"+T_name+"','"+SSN+"','"+R_date+"','"+R_description+"')";

        try {
            stmt.executeQuery(sql7);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }

    // select content/values in report tables

    String sql8 = "SELECT * FROM Report";

    try {
        ResultSet rs3 = stmt.executeQuery(sql8);

        System.out.println("Team Name | SSN | Report Date | Report
Description");

        while(rs3.next()) {
            System.out.println(rs3.getString(1) + "|" + rs3.getInt(2) + "|" +
rs3.getDate(3).toString() + "|" +rs3.getString(4));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }
}

}

```

```

public static void option6() {
    String cSSN = getInput("Enter SSN of Employee whose expense is to be stored");
    int SSN = Integer.parseInt(cSSN.trim());
    // variable representing number of expenses associated with employee
    String cNE = getInput("Enter Number of Expenses to be stored associated with this
employee");
    int NE = Integer.parseInt(cNE.trim());
    // for loop iterates NE(Number of expenses) times
    for(int j=0;j<NE;j= j+1)
    {
        System.out.println("Enter Expense date");
        String E_date = getDateSQL();
        String cAmount = getInput("Enter Expense Amount: (integer value)");
        int Amount = Integer.parseInt(cAmount.trim());
        String E_description = getInput("Enter Expense description");
        // insert a tuple into expense
        String sql1 = "Insert into Expenses values
("+SSN+", "+E_date+", "+Amount+", "+E_description+"");
        try {
            stmt.executeQuery(sql1);
        }
        catch(SQLException e) {
            e.printStackTrace();
        }
    }
    // select content/values from expense table as string

    String sql2 = "SELECT * FROM Expenses";
    try {
        ResultSet rs3 = stmt.executeQuery(sql2);
    }
}

```

```

// display columns in expense table

        System.out.println("SSN | Exp date | Amount | Exp description");

        while(rs3.next()) {

            System.out.println(rs3.getInt(1) + "|" + rs3.getDate(2).toString() + "|" +
rs3.getInt(3) + "|" + rs3.getString(4));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

```

```

public static void option7() {

    String sqlO = "SELECT * FROM Ext_Organization";

    try {

        ResultSet rs = stmt.executeQuery(sqlO);

        System.out.println("Org.Name | Mailing Address | Contact Person | Phone
Number | Anonymous");

        while(rs.next()) {

            System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" + rs.getString(5).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

```

```

        String coptionOE = getInput("Enter 1 if Organization you are entering is in database or
Enter 2 if Organization is not in the database ");

```

```

        int optionOE = Integer.parseInt(coptionOE.trim());

```

```

// If external organization is in database
if (optionOE == 1) {
    String O_name = getInput("Enter Organization name");
    // variable representing number of teams organization sponsor
    String cNT = getInput("Enter Number of Teams this organization is associated
with:");

    // for loop iterates NT(Number of teams times)
    int NT = Integer.parseInt(cNT.trim());
    for(int i=0;i<NT;i= i+1)
    {
        String T_name = getInput("Enter Team name");
        // insert a tuple into sponsor table
        String sql3 = "Insert into Sponsor values ('"+O_name+"','"+T_name+"')";
        // select content/values from sponsor table
        String sql4 = "SELECT * FROM Sponsor";

        try {
            stmt.executeQuery(sql3);

            ResultSet rs1 = stmt.executeQuery(sql4);
            System.out.println("Org. Name | Team Name");
            while(rs1.next()) {
                System.out.println(rs1.getString(1) + "|" +
rs1.getString(2));
            }
        }catch(SQLException e) {
            e.printStackTrace();
        }
    }
}

```

```

// If external organization is not in database
else {
    String O_name = getInput("Enter Organization name");
    String Mailing_Address = getInput("Enter Mailing Address of Organization");
    String ContactPerson = getInput("Enter name of Contact person");
    String cPhoneNumber = getInput("Enter PhoneNumber of Organization");
    int PhoneNumber = Integer.parseInt(cPhoneNumber.trim());

    String cAnonymous = getInput("Enter Y if organization makes Anonymous
donations or else enter N");

    char Anonymous = cAnonymous.charAt(0);

    // insert a tuple into Ext_Organization table
    String sql1 = "Insert into Ext_Organization values
("+O_name+", "+Mailing_Address+", "+ContactPerson+", "+PhoneNumber+", "+Anonymous+")";
    String sql2 = "SELECT * FROM Ext_Organization";

    try {
        stmt.executeQuery(sql1);

        ResultSet rs = stmt.executeQuery(sql2);

        // Listing columns in Ext.Organization table
        System.out.println("Org.Name | Mailing Address | Contact Person |
Phone Number | Anonymous");

        while(rs.next()) {
            System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" + rs.getString(5).charAt(0));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

    // variable to determine type of organization

```

```

Church");

String cOrgType = getInput("Enter Organization Type: 1 for Business, 2 for

int OrgType = Integer.parseInt(cOrgType.trim());

// If organization is Business
if (OrgType == 1) {

    String B_type = getInput("Enter Business Type");

    String cB_size = getInput("Enter size of company");

    int B_size = Integer.parseInt(cB_size.trim());

    String Company_website = getInput("Enter company website");


    // Insert a tuple into Business table
    String sql5 = "Insert into Business values
("+O_name+", "+B_type+", "+B_size+", "+Company_website+"");

    // Select content/values from business table
    String sql6 = "SELECT * FROM Business";

    try {
stmt.executeQuery(sql5);

        ResultSet rs2 = stmt.executeQuery(sql6);

        // display columns in Business table
        System.out.println("Org. Name | Buss. type | Buss. size |

Company website");

        while(rs2.next()) {

            System.out.println(rs2.getString(1) + "|" +
rs2.getString(2) + "|" + rs2.getInt(3) + "|" + rs2.getString(4));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

// If external Organization is Church

```

```

else {
    String Religious_Affiliation = getInput("Enter Religious Affiliation of
Church");

    // Insert a tuple in church table
    String sql7 = "Insert into Church values
('"+O_name+"','"+Religious_Affiliation+"')";

    // select content/values of Church table
    String sql8 = "SELECT * FROM Church";
    try {
stmt.executeQuery(sql7);

        ResultSet rs3 = stmt.executeQuery(sql8);

        // to display columns in church table
        System.out.println("Org. Name | Religious Affiliation");
        while(rs3.next()) {
            System.out.println(rs3.getString(1) + "|" +
rs3.getString(2));

        }

    }catch(SQLException e) {
        e.printStackTrace();
    }
}

// variable to represent number of teams organization is associated with
String cNT = getInput("Enter Number of Teams this organization is associated
with:");

// converting string to integer
int NT = Integer.parseInt(cNT.trim());

// for loop iterates NT(Number of Teams) times
for(int i=0;i<NT;i= i+1)
{

```



```

String T_name = getInput("Enter Team name");

// insert a tuple into sponsor table
String sql3 = "Insert into Sponsor values ('"+O_name+"','"+T_name+"')";

// select content/values of sponsor table
String sql4 = "SELECT * FROM Sponsor";

try {
stmt.executeQuery(sql3);// to execute sql3 query

ResultSet rs1 = stmt.executeQuery(sql4);

// displaying column names in sponsor table
System.out.println("Org. Name | Team Name");
while(rs1.next()) {

// to display contents of sponsor table
System.out.println(rs1.getString(1) + "|" +
rs1.getString(2));

}

}catch(SQLException e) {
e.printStackTrace();
}

}

}

}

public static void option8() {
String sqlp = "SELECT * FROM Person";

try {

ResultSet rsp = stmt.executeQuery(sqlp);

```

```

        // to display coulumns in person table

        System.out.println("SSN | P_name | BirthDate | Race | Gender | Profession |
MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

        while(rsp.next()) {

            System.out.println(rsp.getInt(1) + "|" + rsp.getString(2) + "|" +
rsp.getDate(3).toString() + "|" + rsp.getString(4) + "|" + rsp.getString(5) + "|" + rsp.getString(6) + "|" +
rsp.getString(7) + "|" + rsp.getString(8) + "|" + rsp.getInt(9) + "|" + rsp.getInt(10) + "|" + rsp.getInt(11) + "|" +
rsp.getString(12).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    String coptiond = getInput("Enter 1 if Donor you are entering is a person in database or
Enter 2 if Donor is not in the database ");

    int optiond = Integer.parseInt(coptiond.trim());

    // if donor is existing in database

    if (optiond == 1) {

        String cSSN = getInput("Enter SSN of Donor");

        int SSN = Integer.parseInt(cSSN.trim());

        String cAnonymous = getInput("Enter Y if Donor makes Anonymous donations
or else enter N");

        char Anonymous = cAnonymous.charAt(0);

        // Insert a tuple into donor

        String sql5 = "Insert into Donor values (" + SSN + "," + Anonymous + ")";

        String sql6 = "SELECT * FROM Donor";

        try {

            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            // Displays columns in Donor

```

```

        System.out.println("Donor SSN | Anonymous");
        while(rs2.next()) {
            System.out.println(rs2.getInt(1) + "|" +
rs2.getString(2).charAt(0));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

    // variable that represents number of donations made by donor
    String cND = getInput("Enter Number of Donations made by this Donor");
    // convert string to integer
    int ND = Integer.parseInt(cND.trim());
    // for loop iterates ND(Number of donations)
    for(int i=0;i<ND;i= i+1)
    {
        System.out.println("Enter date of donation");
        String D_date = getDateSQL();
        String cAmount = getInput("Enter Amount Donated by Donor");
        int Amount = Integer.parseInt(cAmount.trim());
        String D_type = getInput("Enter Donation type");
        String Campaign = getInput("Enter name of Fund Raising Campaign");
        // inserting a tuple into donations table
        String sql7 = "Insert into Donations values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Campaign+)";
        // select content/values from donations table
        String sql8 = "SELECT * FROM Donations";

        try {
            stmt.executeQuery(sql7);

```

```

        ResultSet rs3 = stmt.executeQuery(sql8);

        // displays columns in Donations table
        System.out.println("SSN | Donation Date | Amount | Donation
Type | Campaign");

        while(rs3.next()) {

            // displays values/content in Donations table

            System.out.println(rs3.getInt(1) + "|" +
rs3.getDate(2).toString() + "|" + rs3.getInt(3) + "|" + rs3.getString(4) + "|" + rs3.getString(5) );

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    // variable to determine mode of payment
    String cD_mode = getInput("Enter mode of payment: 1 for card , 2 for
check");

    int D_mode = Integer.parseInt(cD_mode.trim());

    // If payment is made by card
    if (D_mode == 1) {

        String Card_No = getInput("Enter card number");
        String Card_Type = getInput("Enter card Type");
        System.out.println("Enter Expiry date on card");
        String Exp_Date = getDateSQL();

        // Insert a tuple into D_Card table
        String sqlc1 = "Insert into D_Card values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Card_No+", "+Card_Type+", "+Exp_Date+)";
        String sqlc2 = "SELECT * FROM D_Card";

        try {

            stmt.executeQuery(sqlc1);

            ResultSet rsca = stmt.executeQuery(sqlc2);

```

```

// display columns in D_Card table
System.out.println("SSN | Donation Date | Amount |
Donation Type | Card No | Card Type | Exp.Date");

while(rsca.next()) {
    System.out.println(rsca.getInt(1) + "|" +
rsca.getDate(2).toString() + "|" + rsca.getInt(3) + "|" + rsca.getString(4) + "|" + rsca.getString(5) + "|" +
rsca.getString(6) + "|" + rsca.getDate(7).toString());
}
}catch(SQLException e) {
    e.printStackTrace();
}
}

// If mode of payment is by check
else {
    String Check_No = getInput("Enter check number");
    // Insert a tuple into D_Check
    String sqlch1 = "Insert into D_Check values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Check_No+"");
    // select content/values of D_Check
    String sqlch2 = "SELECT * FROM D_Check";
    try {
        stmt.executeQuery(sqlch1);

        ResultSet rsch = stmt.executeQuery(sqlch2);
        // Display columns in D_Check table
        System.out.println("SSN | Donation Date | Amount |
Donation Type | Check No ");

        while(rsch.next()) {
            System.out.println(rsch.getInt(1) + "|" +
rsch.getDate(2).toString() + "|" + rsch.getInt(3) + "|" + rsch.getString(4) + "|" + rsch.getString(5));
        }
    }catch(SQLException e) {

```

```

        e.printStackTrace();
    }
}

}

}

// If donor is not existing in database
else {
    String cSSN = getInput("Enter SSN of Donor");
    int SSN = Integer.parseInt(cSSN.trim());
    String P_name = getInput("Enter name of Donor");
    System.out.println("Enter the date of birth of Donor");
    String BirthDate = getDateSQL();
    String Race = getInput("Enter Race of Donor");
    String Gender = getInput("Enter Gender of Donor: Male/Female");
    String Profession = getInput("Enter profession of Donor");
    String MailAddress = getInput("Enter MailAddress of Donor");
    String Email = getInput("Enter Email of Donor");
    String cHomeNumber = getInput("Enter HomeNumber of Donor");
    int HomeNumber = Integer.parseInt(cHomeNumber.trim());
    String cWorkNumber = getInput("Enter WorkNumber of Donor");
    int WorkNumber = Integer.parseInt(cWorkNumber.trim());
    String cCellNumber = getInput("Enter CellNumber of Donor");
    int CellNumber = Integer.parseInt(cCellNumber.trim());
    String cMailingList = getInput("Enter Y if Donor is in mailing list or else enter N");
    char MailingList = cMailingList.charAt(0);

```

```

        // Insert a tuple into person table

        String sql1 = "Insert into Person values
("+SSN+", "+P_name+", "+BirthDate+", "+Race+", "+Gender+", "+Profession+", "+MailAddress+", "+Em
ail+", "+HomeNumber+", "+WorkNumber+", "+CellNumber+", "+MailingList+")";

        String sql2 = "SELECT * FROM Person";

        try {
            stmt.executeQuery(sql1);

            ResultSet rs = stmt.executeQuery(sql2);

            // display columns in person table

            System.out.println("SSN | P_name | BirthDate | Race | Gender |
Profession | MailAddress | Email | HomeNumber | WorkNumber | CellNumber | MailingList");

            while(rs.next()) {

                // display content/values in person table

                System.out.println(rs.getInt(1) + " | " + rs.getString(2) + " | " +
rs.getDate(3).toString() + " | " + rs.getString(4) + " | " + rs.getString(5) + " | " + rs.getString(6) + " | " +
rs.getString(7) + " | " + rs.getString(8) + " | " + rs.getInt(9) + " | " + rs.getInt(10) + " | " + rs.getInt(11) + " | " +
rs.getString(12).charAt(0));

            }

        } catch (SQLException e) {

            e.printStackTrace();

        }

        // variable representing Number of emergency contacts

        String cNEC = getInput("Enter Number of Emergency Contacts this person
has:");

        int NEC = Integer.parseInt(cNEC.trim());

        // nor loop iterates NEC(Number of Emergency contact) times

        for(int j=0; j<NEC; j= j+1)

        {

            String EE_name = getInput("Enter name of Emergency contact");

            String EMailAddress = getInput("Enter MailAddress of Emergency
contact");

```

```

String EEmail = getInput("Enter Email of Emergency contact");

String cEHomeNumber = getInput("Enter HomeNumber of Emergency
contact");

int EHomeNumber = Integer.parseInt(cEHomeNumber.trim());

String cEWorkNumber = getInput("Enter WorkNumber of Emergency
contact");

int EWorkNumber = Integer.parseInt(cEWorkNumber.trim());

String cECellNumber = getInput("Enter CellNumber of Emergency
contact");

int ECellNumber = Integer.parseInt(cECellNumber.trim());

String ERelation = getInput("Enter Relation of Emergency contact");

// Insert a tuple into E_Contact values

String sqlEC1 = "Insert into E_Contact values
("+SSN+", "+EE_name+", "+EMailAddress+", "+EEmail+", "+EHomeNumber+", "+EWorkNumber+", "+ECel
lNumber+", "+ERelation+"");

try {
    stmt.executeQuery(sqlEC1);
}
catch(SQLException e) {
    e.printStackTrace();
}

}

String sqlEC2 = "SELECT * FROM E_Contact";

try {
    ResultSet rsEC = stmt.executeQuery(sqlEC2);

    // To display columns in E_Contact

    System.out.println("SSN | Emer. Contact Name | Mail Address | Email |
Home Number | Work Number | Cell Number | Relation");

    while(rsEC.next()) {

```



```

        System.out.println(rsEC.getInt(1) + "|" + rsEC.getString(2) + "|"
+ rsEC.getString(3) + "|" + rsEC.getString(4) + "|" + rsEC.getInt(5) + "|" + rsEC.getInt(6) + "|" +
rsEC.getInt(7) + "|" + rsEC.getString(8) );

    }

} catch(SQLException e) {

    e.printStackTrace();

}

// variable to determine if Donor remains Anonymous or not
String cAnonymous = getInput("Enter Y if Donor makes Anonymous donations
or else enter N");

char Anonymous = cAnonymous.charAt(0);

// insert a tuple into Donor table
String sql5 = "Insert into Donor values (" + SSN + ", " + Anonymous + ")";

// Display content/value from donor table
String sql6 = "SELECT * FROM Donor";

try {
stmt.executeQuery(sql5);

    ResultSet rs2 = stmt.executeQuery(sql6);

    // display columns in donor table
    System.out.println("Donor SSN | Anonymous");

    while(rs2.next()) {

        System.out.println(rs2.getInt(1) + "|" +
rs2.getString(2).charAt(0));

    }

} catch(SQLException e) {

    e.printStackTrace();

}

// variable to determine number of donations made by donor

```

```

String cND = getInput("Enter Number of Donations made by this Donor");

int ND = Integer.parseInt(cND.trim());

// for loop iterates ND(Number of Donations) times
for(int i=0;i<ND;i= i+1)
{
    System.out.println("Enter date of donation");

    String D_date = getDateSQL();

    String cAmount = getInput("Enter Amount Donated by Donor");
    int Amount = Integer.parseInt(cAmount.trim());

    String D_type = getInput("Enter Donation type");

    String Campaign = getInput("Enter name of Fund Raising Campaign");

    // Insert a tuple into Donations tables

    String sql7 = "Insert into Donations values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Campaign+"");

    String sql8 = "SELECT * FROM Donations";

    try {
        stmt.executeQuery(sql7);

        ResultSet rs3 = stmt.executeQuery(sql8);

        // to display columns in donations table

        System.out.println("SSN | Donation Date | Amount | Donation
Type | Campaign");

        while(rs3.next()) {
            System.out.println(rs3.getInt(1) + "|" +
rs3.getDate(2).toString() + "|" + rs3.getInt(3) + "|" + rs3.getString(4) + "|" + rs3.getString(5) );

        }

    }catch(SQLException e) {
        e.printStackTrace();
    }
}

```

```

check");

String cD_mode = getInput("Enter mode of payment: 1 for card , 2 for

int D_mode = Integer.parseInt(cD_mode.trim());

// if mode of payment is by card
if (D_mode == 1) {

    String Card_No = getInput("Enter card number");

    String Card_Type = getInput("Enter card Type");

    System.out.println("Enter Expiry date on card");

    String Exp_Date = getDateSQL();

    // insert a tuple into D_Card

    String sqlc1 = "Insert into D_Card values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Card_No+", "+Card_Type+", "+Exp_Date+)";

    String sqlc2 = "SELECT * FROM D_Card";

    try {

stmt.executeQuery(sqlc1);

        ResultSet rsca = stmt.executeQuery(sqlc2);

        // display columns in D_Card table

        System.out.println("SSN | Donation Date | Amount |
Donation Type | Card No | Card Type | Exp.Date");

        while(rsca.next()) {

            System.out.println(rsca.getInt(1) + "|" +
rsca.getDate(2).toString() + "|" + rsca.getInt(3) + "|" + rsca.getString(4) + "|" + rsca.getString(5) + "|" +
rsca.getString(6) + "|" + rsca.getDate(7).toString());

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

// If mode of payment is by check

```

```

        else {

            String Check_No = getInput("Enter check number");

            // Insert a tuple into D_Check

            String sqlch1 = "Insert into D_Check values
("+SSN+", "+D_date+", "+Amount+", "+D_type+", "+Check_No+"");

            String sqlch2 = "SELECT * FROM D_Check";

            try {

                stmt.executeQuery(sqlch1);

                ResultSet rsch = stmt.executeQuery(sqlch2);

                // To display columns in D_Check table

                System.out.println("SSN | Donation Date | Amount |
Donation Type | Check No ");

                while(rsch.next()) {

                    System.out.println(rsch.getInt(1) + "|" +
rsch.getDate(2).toString() + "|" + rsch.getInt(3) + "|" + rsch.getString(4) + "|" + rsch.getString(5));

                }

            }catch(SQLException e) {

                e.printStackTrace();

            }

        }

    }

}

```

```

public static void option9() {

    String sqlO = "SELECT * FROM Ext_Organization";

```

```

try {

    ResultSet rs = stmt.executeQuery(sqlO);

    // To display columns in Ext_Organization

    System.out.println("Org.Name | Mailing Address | Contact Person | Phone
Number | Anonymous");

    while(rs.next()) {

        System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" + rs.getString(5).charAt(0));

    }

} catch(SQLException e) {

    e.printStackTrace();

}

String coptionOE = getInput("Enter 1 if Organization you are entering is in database or
Enter 2 if Organization is not in the database ");

int optionOE = Integer.parseInt(coptionOE.trim());

// If organization is in database

if (optionOE == 1) {

    String O_name = getInput("Enter Organization name");

    // Variable that represents number of donations

    String cND = getInput("Enter Number of Donations made by this Organization");

    int ND = Integer.parseInt(cND.trim());

    // for loop iterates ND(Number of donations) times

    for(int i=0;i<ND;i= i+1)

    {

        System.out.println("Enter date of donation");

        String OD_date = getDateSQL();

        String cAmount = getInput("Enter Amount Donated by Donor");

        int Amount = Integer.parseInt(cAmount.trim());

        String OD_type = getInput("Enter Donation type");

```

```

        String Campaign = getInput("Enter name of Fund Raising Campaign");

        // tuple added to Org_Donations

        String sql3 = "Insert into Org_Donations values
('"+O_name+"','"+OD_date+"','"+Amount+"','"+OD_type+"','"+Campaign+"')";

        String sql4 = "SELECT * FROM Org_Donations";

        try {
            stmt.executeQuery(sql3);

            ResultSet rs3 = stmt.executeQuery(sql4);

            // Display columns in Org_Donations

            System.out.println("Org. Name | Donation Date | Amount |
Donation Type | Campaign");

            while(rs3.next()) {

                System.out.println(rs3.getString(1) + "|" +
rs3.getDate(2).toString() + "|" + rs3.getInt(3) + "|" + rs3.getString(4) + "|" + rs3.getString(5));

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

String sOD_mode = getInput("Enter mode of payment: 1 for card, 2 for check");
int OD_mode = Integer.parseInt(sOD_mode.trim());

// If mode of payment is by card
if (OD_mode == 1) {

    String Card_No = getInput("Enter card number");

    String Card_Type = getInput("Enter card Type");

    System.out.println("Enter Expiry date on card");

    String Exp_Date = getDateSQL();

    // Insert tuple into Org_Card

```

```

        String sqlc1 = "Insert into Org_Card values
('"+O_name+"','"+OD_date+"','"+Amount+"','"+OD_type+"','"+Card_No+"','"+Card_Type+"','"+Exp_Date+"')
";

        String sqlc2 = "SELECT * FROM Org_Card";

        try {

            stmt.executeQuery(sqlc1);

            ResultSet rsca = stmt.executeQuery(sqlc2);

            // Display columns in Org_Card

            System.out.println("Org. Name | Donation Date |
Amount | Donation Type | Card No | Card Type | Exp.Date");

            while(rsca.next()) {

                System.out.println(rsca.getString(1) + "|" +
rsca.getDate(2).toString() + "|" + rsca.getInt(3) + "|" + rsca.getString(4) + "|" + rsca.getString(5) + "|" +
rsca.getString(6) + "|" + rsca.getDate(7).toString());

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

    }

    // If mode of payment is by check

    else {

        String Check_No = getInput("Enter check number");

        // Insert a tuple into Org_Check

        String sqlch1 = "Insert into Org_Check values
('"+O_name+"','"+OD_date+"','"+Amount+"','"+OD_type+"','"+Check_No+"')";

        String sqlch2 = "SELECT * FROM Org_Check";

        try {

            stmt.executeQuery(sqlch1);

            ResultSet rsch = stmt.executeQuery(sqlch2);

            // To print columns in Org_Check tables

```

```

        System.out.println("Org. Name | Donation Date |
Amount | Donation Type | Check No ");

        while(rsch.next()) {

            System.out.println(rsch.getString(1) + "|" +
rsch.getDate(2).toString() + "|" + rsch.getInt(3) + "|" + rsch.getString(4) + "|" + rsch.getString(5));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

}

// If organization is not in database
else {

    String O_name = getInput("Enter Organization name");

    String Mailing_Address = getInput("Enter Mailing Address of Organization");

    String ContactPerson = getInput("Enter name of Contact person");

    String cPhoneNumber = getInput("Enter PhoneNumber of Organization");

    int PhoneNumber = Integer.parseInt(cPhoneNumber.trim());

    String cAnonymous = getInput("Enter Y if organization makes Anonymous
donations or else enter N");

    char Anonymous = cAnonymous.charAt(0);

    // Insert a tuple into Ext_Organization

    String sql1 = "Insert into Ext_Organization values
('"+O_name+"','"+Mailing_Address+"','"+ContactPerson+"','"+PhoneNumber+"','"+Anonymous+"')";

    String sql2 = "SELECT * FROM Ext_Organization";

    try {

        stmt.executeQuery(sql1);

```



```

        ResultSet rs = stmt.executeQuery(sql2);

        // Display columns in Ext_Organization

        System.out.println("Org.Name | Mailing Address | Contact Person |
Phone Number | Anonymous");

        while(rs.next()) {

            System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" + rs.getString(5).charAt(0));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

    String cOrgType = getInput("Enter Organization Type: 1 for Business, 2 for
Church");

    int OrgType = Integer.parseInt(cOrgType.trim());

    // If organization is of business type

    if (OrgType == 1) {

        String B_type = getInput("Enter Business Type");

        String cB_size = getInput("Enter size of company");

        int B_size = Integer.parseInt(cB_size.trim());

        String Company_website = getInput("Enter company website");

        // Enter tuple into Business

        String sql5 = "Insert into Business values
('"+O_name+"','"+B_type+"','"+B_size+"','"+Company_website+"')";

        String sql6 = "SELECT * FROM Business";

        try {

            stmt.executeQuery(sql5);

            ResultSet rs2 = stmt.executeQuery(sql6);

            // To print columns in Business table

```

```

        System.out.println("Org. Name | Buss. type | Buss. size |
Company website");

        while(rs2.next()) {

            System.out.println(rs2.getString(1) + "|" +
rs2.getString(2) + "|" + rs2.getInt(3) + "|" + rs2.getString(4));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

// If external organization is Church
else {

    String Religious_Affiliation = getInput("Enter Religious Affiliation of
Church");

    // Insert a tuple into Church

    String sql7 = "Insert into Church values
('"+O_name+"','"+Religious_Affiliation+"')";

    String sql8 = "SELECT * FROM Church";

    try {

stmt.executeQuery(sql7);

        ResultSet rs3 = stmt.executeQuery(sql8);

        // Display columns in Church table

        System.out.println("Org. Name | Religious Affiliation");

        while(rs3.next()) {

            System.out.println(rs3.getString(1) + "|" +
rs3.getString(2));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }
}

```

```

    }

    // variable representing number of donations made
    String cND = getInput("Enter Number of Donations made by this Organization");
    int ND = Integer.parseInt(cND.trim());
    // For loop iterates ND(Number of donations) times
    for(int i=0;i<ND;i= i+1)
    {
        System.out.println("Enter date of donation");
        String OD_date = getDateSQL();
        String cAmount = getInput("Enter Amount Donated by Donor");
        int Amount = Integer.parseInt(cAmount.trim());
        String OD_type = getInput("Enter Donation type");
        String Campaign = getInput("Enter name of Fund Raising Campaign");
        // insert a tuple into Org_Donations table
        String sql3 = "Insert into Org_Donations values
("+O_name+", "+OD_date+", "+Amount+", "+OD_type+", "+Campaign+)";
        String sql4 = "SELECT * FROM Org_Donations";

        try {
            stmt.executeQuery(sql3);

            ResultSet rs3 = stmt.executeQuery(sql4);
            // To print columns of Org_Donations
            System.out.println("Org. Name | Donation Date | Amount |
Donation Type | Campaign");

            while(rs3.next()) {
                System.out.println(rs3.getString(1) + "|" +
rs3.getDate(2).toString() + "|" + rs3.getInt(3) + "|" + rs3.getString(4) + "|" + rs3.getString(5));
            }
        }catch(SQLException e) {

```

```

        e.printStackTrace();
    }

    String cOD_mode = getInput("Enter mode of payment: 1 for card , 2 for
check");

    int OD_mode = Integer.parseInt(cOD_mode.trim());

    // If mode of payment is by card
    if (OD_mode == 1) {
        String Card_No = getInput("Enter card number");
        String Card_Type = getInput("Enter card Type");
        System.out.println("Enter Expiry date on card");
        String Exp_Date = getDateSQL();

        // Insert a tuple into Org_Card table

        String sqlc1 = "Insert into Org_Card values
("+O_name+", "+OD_date+", "+Amount+", "+OD_type+", "+Card_No+", "+Card_Type+", "+Exp_Date+"
";

        String sqlc2 = "SELECT * FROM Org_Card";

        try {
            stmt.executeQuery(sqlc1);

            ResultSet rsca = stmt.executeQuery(sqlc2);

            // To display column names in Org_card

            System.out.println("Org. Name | Donation Date |
Amount | Donation Type | Card No | Card Type | Exp.Date");

            while(rsca.next()) {

                System.out.println(rsca.getString(1) + "|" +
rsca.getDate(2).toString() + "|" + rsca.getInt(3) + "|" + rsca.getString(4) + "|" + rsca.getString(5) + "|" +
rsca.getString(6) + "|" + rsca.getDate(7).toString());

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }
    }

```



```

        String cSSN = getInput("Enter SSN of Client whose Doctor's Name, Doctor's Number is
to be retrieved:");

        // To convert string to Integer
        int SSN = Integer.parseInt(cSSN.trim());

        // Main Query
        String sql10 = "SELECT Doctor_Name, Doctor_Number from client where SSN="+SSN+"";

        try {
            // result of query stored in rs
            ResultSet rs = stmt.executeQuery(sql10);

            // To display Column names in resulting output
            System.out.println("Doctor Name | Doctor Phone Number");

            while(rs.next()) {
                // To print the result
                System.out.println(rs.getString(1) + " | " + rs.getInt(2));
            }
        } catch(SQLException e) {
            e.printStackTrace();
        }
    }

    public static void option11() {
        System.out.println("Enter start date of expense");

        // To get date from user
        String st_date = getDateSQL();

        System.out.println("Enter end date of expense");
        String end_date = getDateSQL();
    }
}

```

```

        // Main Query

        String sql11 = "select SSN, sum(Amount)as Total from Expenses where E_date
between "+st_date+" and "+end_date+" group by SSN order by Total";

        try {

            // result of query
            ResultSet rs = stmt.executeQuery(sql11);

            // To display Column names in resulting output
            System.out.println("SSN | Total Expense");

            while(rs.next()) {

                // To print the result
                System.out.println(rs.getInt(1) + " | " + rs.getInt(2));

            }

        }catch(SQLException e) {

            e.printStackTrace();

        }

    }

    public static void option12() {

        String cSSN = getInput("Enter SSN of Client to get list of SSN of volunteers ");

        int SSN = Integer.parseInt(cSSN.trim());

        // Mian Query

        String sql12 = "select distinct SSN from serve where T_name in (select T_name
from care where SSN = "+SSN+")";

        try {

            // result of query
            ResultSet rs = stmt.executeQuery(sql12);

```

```

        // To display Column name in resulting output
        System.out.println("SSN of volunteers");
        while(rs.next()) {
            // To print the result
            System.out.println(rs.getInt(1));
        }
    }catch(SQLException e) {
        e.printStackTrace();
    }
}

public static void option13() {
    // Main Query
    String sql13 = "SELECT
P_NAME,MAILADDRESS,EMAIL,HOMENUMBER,WORKNUMBER,CELLNUMBER FROM PERSON where SSN
in(select SSN from care where T_Name in(SELECT UNIQUE(T_NAME) FROM SPONSOR WHERE O_NAME
BETWEEN 'b%' AND 'k%')) ORDER BY P_NAME";

    try {
        // result of query
        ResultSet rs = stmt.executeQuery(sql13);

        // To display Column names in resulting output
        System.out.println("Client Name | Mail Address | Email | Home
Number | Work Number | Cell Number");

        while(rs.next()) {
            // To print the result
            System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" + rs.getInt(5) + "|" + rs.getInt(6));
        }
    }
}

```



```

        }catch(SQLException e) {
            e.printStackTrace();
        }

    }

    public static void option14() {
        // main query
        String sql14 = "SELECT P.P_NAME, SUM(DO.Amount) as Total,D.Anonymous
FROM DONOR D, DONATIONS DO, EMPLOYEE E, PERSON P WHERE  D.SSN=DO.SSN AND D.SSN = E.SSN
and P.SSN = E.SSN GROUP BY P.P_NAME, D.Anonymous order by total";

        try {
            // result of query
            ResultSet rs = stmt.executeQuery(sql14);
            // To display Column names in resulting output
            System.out.println("Name | Total Amount | Anonymous");
            while(rs.next()) {
                // To print the result
                System.out.println(rs.getString(1) + "|" + rs.getInt(2) + "|"
+rs.getString(3).charAt(0));
            }
        }catch(SQLException e) {
            e.printStackTrace();
        }

    }

```

```

public static void option15() {

    // main query

    String sql15 = "Select
P_Name,MailAddress,Email,HomeNumber,WorkNumber,CellNumber from Person where SSN in (Select
SSN from serve where No_of_hours in (Select Max(No_of_hours) from serve where S_MONTH in
(3,4,4,6) group by T_NAME))";

    try {

        // result of query

        ResultSet rs = stmt.executeQuery(sql15);

        // To display Column names in resulting output

        System.out.println("Vol. Name | Mail Address | Email | Home Number |
WorkNumber | Cell Number ");

        while(rs.next()) {

            // To print the result

            System.out.println(rs.getString(1) + "|" + rs.getString(2) + "|" +
rs.getString(3) + "|" + rs.getInt(4) + "|" +rs.getInt(5) + "|" + rs.getInt(6));

        }

    }catch(SQLException e) {

        e.printStackTrace();

    }

}

```

```

public static void option16() {

    String sqlsal = "select SSN, salary from employee";

    try {

        // result of query before update

```

```

        ResultSet rs = stmt.executeQuery(sqlsal);

        // To display Column names in resulting output
        System.out.println("SSN | Salary before update");
        while(rs.next()) {

            // To print the result
            System.out.println(rs.getInt(1) + "|" + rs.getInt(2));

        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

    // main query
    String sql16 = "Update Employee set salary = salary *1.10 where SSN in (select
SSN from report group by SSN having count(SSN)>1)";

    try {
        stmt.executeQuery(sql16);

        // result of query after update
        ResultSet rs1 = stmt.executeQuery(sqlsal);

        // To display Column names in resulting output
        System.out.println("SSN | Salary after update");
        while(rs1.next()) {

            // To print the result
            System.out.println(rs1.getInt(1) + "|" + rs1.getInt(2));

        }
    }catch(SQLException e) {
        e.printStackTrace();
    }

}

```

```

        public static void option17() {
            String sqlcl = "select * from client";

            try {
                ResultSet rs = stmt.executeQuery(sqlcl);

                System.out.println("SSN | Doctor Name | Doctor Number | Attorney
Name | Attorney Number | Date Assigned");

                while(rs.next()) {

                    // To print the result

                    System.out.println(rs.getInt(1) + "|" + rs.getString(2)+ "|" +
rs.getInt(3) + "|" + rs.getString(4) + "|" + rs.getInt(5) + "|" + rs.getDate(6).toString());

                }

            }catch(SQLException e) {

                e.printStackTrace();

            }

            // Main Query

            String sql17 = "Delete from Client where SSN in(Select SSN from CLIENT_Need
where SSN in (Select SSN from Insurance where I_Type='health') and Need='transportation' and
N_value<5)";

            try {

                stmt.executeQuery(sql17);

                // result of query

                ResultSet rs1 = stmt.executeQuery(sqlcl);

                // To display Column names in resulting output

                System.out.println("SSN | Doctor Name | Doctor Number | Attorney
Name | Attorney Number | Date Assigned");

                while(rs1.next()) {

                    // To print the result

```

```

        System.out.println(rs1.getInt(1) + "|" + rs1.getString(2)+ "|" +
rs1.getInt(3) + "|" + rs1.getString(4) + "|" + rs1.getInt(5) + "|" + rs1.getDate(6).toString());
    }

    }catch(SQLException e) {
        e.printStackTrace();
    }

}

```

```

public static void option18() {
    // to import file
    // path of file we want to import
    String path = getInput ("Please enter the file path of the file to be imported");
    File myfile = new File (path); // file that is imported
    FileReader f_r = null; // To read file
    try{
        f_r = new FileReader(myfile.getAbsolutePath());
        BufferedReader b_r = new BufferedReader (f_r);
        String line;
        // while loop continues as long as it encounters null character
        while ((line = b_r.readLine()) != null) {
            // Splitting string into different attributes
            String[] parts = line.split(","); // split used is ","
            String Team = parts[0];
            String Type = parts[1];
            String date = parts[2];
            // insert into team
            String sql = "Insert into team values
(\""+Team+"\",\""+Type+"\",\""+date+"\"");

```

```

        try {
            stmt.executeUpdate(sql);
        } catch (SQLException ex) {
            System.err.println("SQLException:" + ex.getMessage());
        }
    }
    // while loop ends
    System.out.println("Import completed");
} catch (IOException e) {
    System.out.println("Error in reading file");
    e.printStackTrace();
}
// To select content/values from Team table
String sqlT = "SELECT * FROM Team";
try {
    // result of query
    ResultSet rs3 = stmt.executeQuery(sqlT);
    // Display columns in resulting query
    System.out.println("Team Name | Team type | Date Formed");
    while(rs3.next()) {
        // printing result
        System.out.println(rs3.getString(1) + "|" + rs3.getString(2) + "|"
+ rs3.getDate(3).toString());
    }
} catch (SQLException e) {
    e.printStackTrace();
}
}

```

```

public static String quote (String s)
{
    return "\"" + s + "\"";
}

```

```

public static void option19() {
    // Export to a file
    // file path where it need to be exported
    String path = getInput ("Please enter the file path of the file to export");
    File myfile = new File (path); // file that is exported
    FileWriter f_w = null; // to write ina file
    try{
        f_w = new FileWriter(myfile.getAbsolutePath());
        BufferedWriter b_w = new BufferedWriter (f_w);

        String sql = "select P_name, mailaddress from person";
        try {
            ResultSet rs4 = stmt.executeQuery(sql);
            //System.out.println(" Person Name | Mail Address");
            while(rs4.next()) {
                //System.out.println(rs4.getString(1) + "|" +
rs4.getString(2));
                b_w.write(quote(rs4.getString(1) + "|" + rs4.getString(2)
+ "\n"));
            }
        }catch(SQLException e) {
            e.printStackTrace();
        }
    }
}

```

```
        b_w.close(); // writing done

        System.out.println("Export Completed- Printed into text file");
    }
    catch (IOException e){
        System.out.println("Error while writing file");
        e.printStackTrace();
    }

}

}
```


Task 6. Java program Execution

6.1. Scrip file showing the testing of query 1

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
3. Enter a new volunteer into the database and associate him or her with one or more  
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  
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  
12. Retrieve the list of volunteers that are members of teams that support a  
13. Retrieve the names and contact information of the clients that are supported by  
14. Retrieve the name and total amount donated by donors that are also employees.  
15. For each team, retrieve the name and associated contact information of the  
16. Increase the salary by 10% of all employees to whom more than one team must  
17. Delete all clients who do not have health insurance and whose value of importance  
18. Import: Enter new teams from a data file until the file is empty (the user should  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

```
1  
Enter Team name  
zambo  
Enter Team type: Emergency/NonEmergency  
Emergency
```

Enter the date when team was formed

month(mm):

09

day(dd):

15

year(yyyy):

2014

T_name | T_type | DateFormed

zambo|Emergency|2014-09-15

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

1

Enter Team name

rambo

Enter Team type: Emergency/NonEmergency

NonEmergency

Enter the date when team was formed

month(mm):

03

day(dd):

03

year(yyyy):

1993

T_name | T_type | DateFormed

zambo|Emergency|2014-09-15

rambo|NonEmergency|1993-03-03

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

1

Enter Team name

tambo

Enter Team type: Emergency/NonEmergency

NonEmergency

Enter the date when team was formed

month(mm):

10

day(dd):

24

year(yyyy):

2016

T_name | T_type | DateFormed

zambo|Emergency|2014-09-15

rambo|NonEmergency|1993-03-03

tambo|NonEmergency|2016-10-24

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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

18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)

19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

1

Enter Team name

fambo

Enter Team type: Emergency/NonEmergency

Emergency

Enter the date when team was formed

month(mm):

09

day(dd):

30

year(yyyy):

2013

T_name | T_type | DateFormed

zambo|Emergency|2014-09-15

rambo|NonEmergency|1993-03-03

tambo|NonEmergency|2016-10-24

fambo|Emergency|2013-09-30

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

```
1
Enter Team name
cambo
Enter Team type: Emergency/NonEmergency
NonEmergency
Enter the date when team was formed
month(mm):
03
day(dd):
30
year(yyyy):
2017
T_name | T_type | DateFormed
zambo|Emergency|2014-09-15
rambo|NonEmergency|1993-03-03
tambo|NonEmergency|2016-10-24
fambo|Emergency|2013-09-30
cambo|NonEmergency|2017-03-30
```

6.2. Scrip file showing the testing of query 2

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the
volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should
be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list
and output them to a data file instead of screen (the user should be asked to enter
the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

2
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
Enter 1 if client you are entering is a person in database or Enter 2 if client is
not in the database
2
Enter SSN of Client
126754
Enter name of Client
```

```

kang
Enter the date of birth of client
month(mm):
12
day(dd):
1
year(yyyy):
1998
Enter Race of Client
asian
Enter Gender of Client: Male/Female
Male
Enter profession of Client
professor
Enter MailAddress of Client
deonne circle
Enter Email of Client
kang@gmail.com
Enter HomeNumber of Client
178645
Enter WorkNumber of Client
198523
Enter CellNumber of Client
186732
Enter Y if client is in mailing list or else enter N
Y
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
Enter Number of Emergency Contacts this person has:
2
Enter name of Emergency contact
ka
Enter MailAddress of Emergency contact
sw st
Enter Email of Emergency contact
ka@gmail.com
Enter HomeNumber of Emergency contact
189756
Enter WorkNumber of Emergency contact
876235
Enter CellNumber of Emergency contact
094589
Enter Relation of Emergency contact
wife
Enter name of Emergency contact
ng
Enter MailAddress of Emergency contact
jy st
Enter Email of Emergency contact
ng@gmail.com
Enter HomeNumber of Emergency contact
908278
Enter WorkNumber of Emergency contact

```


190856
Enter CellNumber of Emergency contact
190734
Enter Relation of Emergency contact
son
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
Enter Doctor Name of Client
gray
Enter Doctor Number of Client
786091
Enter Attorney Name of Client
attorn
Enter Attorney Number of Client
092671
Enter the date when client was assigned to organization
month(mm):
12
day(dd):
18
year(yyyy):
2016
SSN | Doctor_Name | Doctor_Number | Attorney_Name | Attorney_Number | Date_Assigned
126754|gray|786091|attorn|92671|2016-12-18
Enter Number of Teams this client is associated with
2
Enter Team name client is associated with:
zambo
Enter Y if client is Active in this team or else enter N
Y
Enter Team name client is associated with:
rambo
Enter Y if client is Active in this team or else enter N
Y
SSN | T_Name | Active
126754|zambo|Y
126754|rambo|Y
Enter Number of needs client has
2
Enter a Need of client
transportation
Enter value associated with this need
3
Enter a Need of client
housekeeping
Enter value associated with this need
8
SSN | Need | Value
126754|transportation|3
126754|housekeeping|8
Enter Number of Insurance Policies client has
1
Enter a Policy_ID

```
6g64d2
Enter a Provider_ID
g67f22
Enter Provider Address
slaj st
Enter insurance type
life
Policy_ID | SSN | Provider_ID | ProviderAddress | I_type
6g64d2|126754|g67f22|slaj st|life
```

```
-----
-----
WELCOME TO THE DATABASE OF PAN
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-----
```

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
Enter 1 if client you are entering is a person in database or Enter 2 if client is
not in the database

2

Enter SSN of Client

897145

Enter name of Client

sridhar

Enter the date of birth of client

month(mm):

12

day(dd):

12

year(yyyy):

1965

Enter Race of Client

asian

Enter Gender of Client: Male/Female

Male

Enter profession of Client

professor

Enter MailAddress of Client

david st

Enter Email of Client

sridhar@gmail.com

Enter HomeNumber of Client

189672

Enter WorkNumber of Client

197572

Enter CellNumber of Client

794161

Enter Y if client is in mailing list or else enter N

Y

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |

HomeNumber | WorkNumber | CellNumber | MailingList

126754|kang|1998-12-01|asian|Male|professor|deonne

circle|kang@gmail.com|178645|198523|186732|Y

897145|sridhar|1965-12-12|asian|Male|professor|david

st|sridhar@gmail.com|189672|197572|794161|Y

Enter Number of Emergency Contacts this person has:

1

Enter name of Emergency contact

sri

Enter MailAddress of Emergency contact

david st

Enter Email of Emergency contact

sri@gmail.com

Enter HomeNumber of Emergency contact

982014

Enter WorkNumber of Emergency contact

198367

Enter CellNumber of Emergency contact

198267

Enter Relation of Emergency contact

wife

SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell Number | Relation

126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife

126754|ng|jy st|ng@gmail.com|908278|190856|190734|son

897145|sri|david st|sri@gmail.com|982014|198367|198267|wife

Enter Doctor Name of Client

queen

Enter Doctor Number of Client

189673

Enter Attorney Name of Client

attorne

Enter Attorney Number of Client

980167

Enter the date when client was assigned to organization
month(mm):

12

day(dd):

19

year(yyyy):

1980

SSN | Doctor_Name | Doctor_Number | Attorney_Name | Attorney_Number | Date_Assigned

126754|gray|786091|attorn|92671|2016-12-18

897145|queen|189673|attorne|980167|1980-12-19

Enter Number of Teams this client is associated with

1

Enter Team name client is associated with:

zambo

Enter Y if client is Active in this team or else enter N

Y

SSN | T_Name | Active

126754|zambo|Y

126754|rambo|Y

897145|zambo|Y

Enter Number of needs client has

1

Enter a Need of client

transportation

Enter value associated with this need

7

SSN | Need | Value

126754|transportation|3

126754|housekeeping|8

897145|transportation|7

Enter Number of Insurance Policies client has

2

Enter a Policy_ID

s4d4d4

Enter a Provider_ID

f6gf35

Enter Provider Address

brooks st

Enter insurance type

```

d45d23
Enter a Policy_ID
d45d3a
Enter a Provider_ID
g567f3
Enter Provider Address
sw st
Enter insurance type
health
Policy_ID | SSN | Provider_ID | ProviderAddress | I_type
6g64d2|126754|g67f22|slaj st|life
s4d4d4|897145|f6gf35|brooks st|d45d23
d45d3a|897145|g567f3|sw st|health

```

```

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WELCOME TO THE DATABASE OF PAN
-----

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Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

2

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList

126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y

897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y

Enter 1 if client you are entering is a person in database or Enter 2 if client is
not in the database

2

Enter SSN of Client

678109

Enter name of Client

ram

Enter the date of birth of client

month(mm):

12

day(dd):

18

year(yyyy):

1998

Enter Race of Client

latin

Enter Gender of Client: Male/Female

Male

Enter profession of Client

cook

Enter MailAddress of Client

grat st

Enter Email of Client

ram@gmail.com

Enter HomeNumber of Client

686156

Enter WorkNumber of Client

985675

Enter CellNumber of Client

678342

Enter Y if client is in mailing list or else enter N

N

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList

126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y

897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y

678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
Enter Number of Emergency Contacts this person has:

1

Enter name of Emergency contact

ra

Enter MailAddress of Emergency contact

das st

Enter Email of Emergency contact

```

ra@gmail.com
Enter HomeNumber of Emergency contact
675147
Enter WorkNumber of Emergency contact
091784
Enter CellNumber of Emergency contact
981674
Enter Relation of Emergency contact
wife
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
Enter Doctor Name of Client
doct
Enter Doctor Number of Client
875634
Enter Attorney Name of Client
anthony
Enter Attorney Number of Client
190567
Enter the date when client was assigned to organization
month(mm):
12
day(dd):
18
year(yyyy):
1990
SSN | Doctor_Name | Doctor_Number | Attorney_Name | Attorney_Number | Date_Assigned
126754|gray|786091|attorn|92671|2016-12-18
897145|queen|189673|attorne|980167|1980-12-19
678109|doct|875634|anthony|190567|1990-12-18
Enter Number of Teams this client is associated with
1
Enter Team name client is associated with:
cambo
Enter Y if client is Active in this team or else enter N
Y
SSN | T_Name | Active
126754|zambo|Y
126754|rambo|Y
897145|zambo|Y
678109|cambo|Y
Enter Number of needs client has
2
Enter a Need of client
food
Enter value associated with this need
8
Enter a Need of client
shopping
Enter value associated with this need
4

```

```

SSN | Need | Value
126754|transportation|3
126754|housekeeping|8
897145|transportation|7
678109|food|8
678109|shopping|4
Enter Number of Insurance Policies client has
1
Enter a Policy_ID
t55s4q
Enter a Provider_ID
y7g4s5
Enter Provider Address
sa st
Enter insurance type
auto
Policy_ID | SSN | Provider_ID | ProviderAddress | I_type
6g64d2|126754|g67f22|slaj st|life
s4d4d4|897145|f6gf35|brooks st|d45d23
d45d3a|897145|g567f3|sw st|health
t55s4q|678109|y7g4s5|sa st|auto
-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----
Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the
volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

```

2
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
Enter 1 if client you are entering is a person in database or Enter 2 if client is
not in the database

```

```

2
Enter SSN of Client
895712
Enter name of Client
david
Enter the date of birth of client
month(mm):
12
day(dd):
18
year(yyyy):
1999
Enter Race of Client
african
Enter Gender of Client: Male/Female
Male
Enter profession of Client
Chef
Enter MailAddress of Client
ha st
Enter Email of Client
david@gmail.com
Enter HomeNumber of Client
189673
Enter WorkNumber of Client
189673
Enter CellNumber of Client
189563
Enter Y if client is in mailing list or else enter N
N

```

```

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y

```

897145|sridhar|1965-12-12|asian|Male|professor|david
 st|sridhar@gmail.com|189672|197572|794161|Y
 678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
 895712|david|1999-12-18|african|Male|Chef|ha
 st|david@gmail.com|189673|189673|189563|N
 Enter Number of Emergency Contacts this person has:
 1
 Enter name of Emergency contact
 da
 Enter MailAddress of Emergency contact
 sla st
 Enter Email of Emergency contact
 da@gmail.com
 Enter HomeNumber of Emergency contact
 189567
 Enter WorkNumber of Emergency contact
 190672
 Enter CellNumber of Emergency contact
 189567
 Enter Relation of Emergency contact
 son

SSN	Emer. Contact Name	Mail Address	Email	Home Number	Work Number	Cell Number	Relation
126754	ka sw st	ka@gmail.com	189756	876235	94589		wife
126754	ng jy st	ng@gmail.com	908278	190856	190734		son
897145	sri david st	sri@gmail.com	982014	198367	198267		wife
678109	ra das st	ra@gmail.com	675147	91784	981674		wife
895712	da sla st	da@gmail.com	189567	190672	189567		son

 Enter Doctor Name of Client
 right
 Enter Doctor Number of Client
 180767
 Enter Attorney Name of Client
 att
 Enter Attorney Number of Client
 180851
 Enter the date when client was assigned to organization
 month(mm):
 12
 day(dd):
 01
 year(yyyy):
 2001

SSN	Doctor_Name	Doctor_Number	Attorney_Name	Attorney_Number	Date_Assigned
126754	gray	786091	attorn	92671	2016-12-18
897145	queen	189673	attorne	980167	1980-12-19
678109	doct	875634	anthony	190567	1990-12-18
895712	right	180767	att	180851	2001-12-01

 Enter Number of Teams this client is associated with
 1
 Enter Team name client is associated with:
 tambo
 Enter Y if client is Active in this team or else enter N
 Y

SSN	T_Name	Active
126754	gray	Y
897145	queen	Y
678109	doct	Y
895712	right	Y

```

126754|zambo|Y
126754|rambo|Y
897145|zambo|Y
678109|cambo|Y
895712|tambo|Y
Enter Number of needs client has
1
Enter a Need of client
visiting
Enter value associated with this need
2
SSN | Need | Value
126754|transportation|3
126754|housekeeping|8
897145|transportation|7
678109|food|8
678109|shopping|4
895712|visiting|2
Enter Number of Insurance Policies client has
1
Enter a Policy_ID
hy78d3
Enter a Provider_ID
huy67f
Enter Provider Address
ft st
Enter insurance type
home
Policy_ID | SSN | Provider_ID | ProviderAddress | I_type
6g64d2|126754|g67f22|slaj st|life
s4d4d4|897145|f6gf35|brooks st|d45d23
d45d3a|897145|g567f3|sw st|health
t55s4q|678109|y7g4s5|sa st|auto
hy78d3|895712|huy67f|ft st|home

```

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

2

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N
895712	david	1999-12-18	african	Male	Chef	ha st	david@gmail.com	189673	189673	189563	N

Enter 1 if client you are entering is a person in database or Enter 2 if client is not in the database

2

Enter SSN of Client

457017

Enter name of Client

kristi

Enter the date of birth of client

month(mm):

12

day(dd):

19

year(yyyy):

1980

Enter Race of Client

american

Enter Gender of Client: Male/Female

Male

Enter profession of Client

teacher

Enter MailAddress of Client

kr st

Enter Email of Client
kristi@gmail.com
Enter HomeNumber of Client
780145
Enter WorkNumber of Client
091478
Enter CellNumber of Client
196782
Enter Y if client is in mailing list or else enter N
Y
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
Enter Number of Emergency Contacts this person has:
1
Enter name of Emergency contact
kri
Enter MailAddress of Emergency contact
kr st
Enter Email of Emergency contact
kri@gmail.com
Enter HomeNumber of Emergency contact
180872
Enter WorkNumber of Emergency contact
189056
Enter CellNumber of Emergency contact
179056
Enter Relation of Emergency contact
wife
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
895712|da|sla st|da@gmail.com|189567|190672|189567|son
457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife
Enter Doctor Name of Client
quin
Enter Doctor Number of Client
190562
Enter Attorney Name of Client
akaine
Enter Attorney Number of Client
780178
Enter the date when client was assigned to organization
month(mm):

```

12
day(dd):
17
year(yyyy):
1980
SSN | Doctor_Name | Doctor_Number | Attorney_Name | Attorney_Number | Date_Assigned
126754|gray|786091|attorn|92671|2016-12-18
897145|queen|189673|attorne|980167|1980-12-19
678109|doct|875634|anthony|190567|1990-12-18
895712|right|180767|att|180851|2001-12-01
457017|quin|190562|akaine|780178|1980-12-17
Enter Number of Teams this client is associated with
1
Enter Team name client is associated with:
fambo
Enter Y if client is Active in this team or else enter N
Y
SSN | T_Name | Active
126754|zambo|Y
126754|rambo|Y
897145|zambo|Y
678109|cambo|Y
895712|tambo|Y
457017|fambo|Y
Enter Number of needs client has
1
Enter a Need of client
yard work
Enter value associated with this need
10
SSN | Need | Value
126754|transportation|3
126754|housekeeping|8
897145|transportation|7
678109|food|8
678109|shopping|4
895712|visiting|2
457017|yard work|10
Enter Number of Insurance Policies client has
1
Enter a Policy_ID
1t67f4
Enter a Provider_ID
a56f24
Enter Provider Address
ant st
Enter insurance type
auto
Policy_ID | SSN | Provider_ID | ProviderAddress | I_type
6g64d2|126754|g67f22|slaj st|life
s4d4d4|897145|f6gf35|brooks st|d45d23
d45d3a|897145|g567f3|sw st|health
t55s4q|678109|y7g4s5|sa st|auto
hy78d3|895712|huy67f|ft st|home
1t67f4|457017|a56f24|ant st|auto

```

6.3. Scrip file showing the testing of query 3

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

3
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
```

```

895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
2
Enter SSN of volunteer
178578
Enter name of volunteer
black
Enter the date of birth of volunteer
month(mm):
12
day(dd):
17
year(yyyy):
1990
Enter Race of volunteer
american
Enter Gender of volunteer: Male/Female
Male
Enter profession of volunteer
cook
Enter MailAddress of volunteer
sw st
Enter Email of volunteer
black@gmail.com
Enter HomeNumber of volunteer
189678
Enter WorkNumber of volunteer
178925
Enter CellNumber of volunteer
267945
Enter Y if volunteer is in mailing list or else enter N
Y
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
Enter Number of Emergency Contacts this person has:
1
Enter name of Emergency contact
bla
Enter MailAddress of Emergency contact
ft st

```


Enter Email of Emergency contact
bla@gmail.com
Enter HomeNumber of Emergency contact
679145
Enter WorkNumber of Emergency contact
678156
Enter CellNumber of Emergency contact
178025
Enter Relation of Emergency contact
daughter
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
895712|da|sla st|da@gmail.com|189567|190672|189567|son
457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife
178578|bla|ft st|bla@gmail.com|679145|678156|178025|daughter
Enter the date when volunteer joined PAN
month(mm):
12
day(dd):
12
year(yyyy):
1999
Enter the recent training date of volunteer
month(mm):
12
day(dd):
16
year(yyyy):
2016
Enter Recent training location of volunteer
dallas
SSN | Date_Joined | Recent Training Date | Recent Training Location
178578|1999-12-12|2016-12-16|dallas
Enter Number of Teams this volunteer is associated with
2
Enter Team name volunteer is associated with:
zambo
Enter Month as integer: 1 for January, 2 for February,...12 for December
1
Enter Number of hours volunteer worked
13
Enter Y if volunteer is Active in this team or else enter N
Y
Enter Team name volunteer is associated with:
rambo
Enter Month as integer: 1 for January, 2 for February,...12 for December
2
Enter Number of hours volunteer worked
56
Enter Y if volunteer is Active in this team or else enter N
Y

SSN	T_Name	Month	No of hours	Active
178578	zambo	1	13	Y
178578	rambo	2	56	Y

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

3

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N

```

895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
2
Enter SSN of volunteer
459017
Enter name of volunteer
white
Enter the date of birth of volunteer
month(mm):
09
day(dd):
19
year(yyyy):
1996
Enter Race of volunteer
african
Enter Gender of volunteer: Male/Female
Male
Enter profession of volunteer
teacher
Enter MailAddress of volunteer
gr st
Enter Email of volunteer
white@gmail.com
Enter HomeNumber of volunteer
1670916
Enter WorkNumber of volunteer
167892
Enter CellNumber of volunteer
156792
Enter Y if volunteer is in mailing list or else enter N
N
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter Number of Emergency Contacts this person has:
1

```

Enter name of Emergency contact
wh
Enter MailAddress of Emergency contact
ark st
Enter Email of Emergency contact
wh@gmail.com
Enter HomeNumber of Emergency contact
178902
Enter WorkNumber of Emergency contact
178902
Enter CellNumber of Emergency contact
178923
Enter Relation of Emergency contact
son
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
895712|da|sla st|da@gmail.com|189567|190672|189567|son
457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife
178578|bla|ft st|bla@gmail.com|679145|678156|178025|daughter
459017|wh|ark st|wh@gmail.com|178902|178902|178923|son
Enter the date when volunteer joined PAN
month(mm):
1
day(dd):
13
year(yyyy):
1987
Enter the recent training date of volunteer
month(mm):
12
day(dd):
13
year(yyyy):
2016
Enter Recent training location of volunteer
dallas
SSN | Date_Joined | Recent Training Date | Recent Training Location
178578|1999-12-12|2016-12-16|dallas
459017|1987-01-13|2016-12-13|dallas
Enter Number of Teams this volunteer is associated with
1
Enter Team name volunteer is associated with:
rambo
Enter Month as integer: 1 for January, 2 for February,...12 for December
3
Enter Number of hours volunteer worked
17
Enter Y if volunteer is Active in this team or else enter N
Y
SSN | T_Name | Month | No of hours | Active
178578|zambo|1|13|Y

178578|rambo|2|56|Y
459017|rambo|3|17|Y

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

3

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N

```

895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
1
Enter SSN of volunteer
126754
Enter the date when volunteer joined PAN
month(mm):
1
day(dd):
18
year(yyyy):
1998
Enter the recent training date of volunteer
month(mm):
1
day(dd):
18
year(yyyy):
2016
Enter Recent training location of volunteer
houston
SSN | Date_Joined | Recent Training Date | Recent Training Location
178578|1999-12-12|2016-12-16|dallas
459017|1987-01-13|2016-12-13|dallas
126754|1998-01-18|2016-01-18|houston
Enter Number of Teams this volunteer is associated with
2
Enter Team name volunteer is associated with:
tambo
Enter Month in integer: 1 for January, 2 for February,..12 for December
7
Enter Number of hours volunteer worked
4
Enter Y if volunteer is Active in this team or else enter N
Y
Enter Team name volunteer is associated with:
fambo
Enter Month in integer: 1 for January, 2 for February,..12 for December
12
Enter Number of hours volunteer worked
14
Enter Y if volunteer is Active in this team or else enter N
Y
SSN | T_Name | Month | No of hours | Active
178578|zambo|1|13|Y
178578|rambo|2|56|Y
459017|rambo|3|17|Y

```

126754|tambo|7|4|Y
126754|fambo|12|14|Y

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

3

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N

```

895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
1
Enter SSN of volunteer
897145
Enter the date when volunteer joined PAN
month(mm):
12
day(dd):
12
year(yyyy):
1990
Enter the recent training date of volunteer
month(mm):
1
day(dd):
1
year(yyyy):
2016
Enter Recent training location of volunteer
newyork
SSN | Date_Joined | Recent Training Date | Recent Training Location
897145|1990-12-12|2016-01-01|newyork
178578|1999-12-12|2016-12-16|dallas
459017|1987-01-13|2016-12-13|dallas
126754|1998-01-18|2016-01-18|houston
Enter Number of Teams this volunteer is associated with
1
Enter Team name volunteer is associated with:
cambo
Enter Month in integer: 1 for January, 2 for February,..12 for December
1
Enter Number of hours volunteer worked
12
Enter Y if volunteer is Active in this team or else enter N
Y
SSN | T_Name | Month | No of hours | Active
897145|cambo|1|12|Y
178578|zambo|1|13|Y
178578|rambo|2|56|Y
459017|rambo|3|17|Y
126754|tambo|7|4|Y
126754|fambo|12|14|Y

```

```

-----
-----

```

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

3

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N
895712	david	1999-12-18	african	Male	Chef	ha st	david@gmail.com	189673	189673	189563	N
457017	kristi	1980-12-19	american	Male	teacher	kr st	kristi@gmail.com	780145	91478	196782	Y
178578	black	1990-12-17	american	Male	cook	sw st	black@gmail.com	189678	178925	267945	Y

```

459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
1
Enter SSN of volunteer
678109
Enter the date when volunteer joined PAN
month(mm):
1
day(dd):
1
year(yyyy):
2000
Enter the recent training date of volunteer
month(mm):
12
day(dd):
17
year(yyyy):
2010
Enter Recent training location of volunteer
chicago
SSN | Date_Joined | Recent Training Date | Recent Training Location
897145|1990-12-12|2016-01-01|newyork
678109|2000-01-01|2010-12-17|chicago
178578|1999-12-12|2016-12-16|dallas
459017|1987-01-13|2016-12-13|dallas
126754|1998-01-18|2016-01-18|houston
Enter Number of Teams this volunteer is associated with
1
Enter Team name volunteer is associated with:
rambo
Enter Month in integer: 1 for January, 2 for February,..12 for December
2
Enter Number of hours volunteer worked
13
Enter Y if volunteer is Active in this team or else enter N
Y
SSN | T_Name | Month | No of hours | Active
897145|cambo|1|12|Y
678109|rambo|2|13|Y
178578|zambo|1|13|Y
178578|rambo|2|56|Y
459017|rambo|3|17|Y
126754|tambo|7|4|Y
126754|fambo|12|14|Y

```

6.4. Scrip file showing the testing of query 4

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit  
  
Please take care. The System is CASE-SENSITIVE  
  
4  
Enter SSN of volunteer  
897145  
Enter Number of Teams this volunteer is associated with  
1  
Enter Team name volunteer is associated with:  
cambo
```

Enter Month as integer: 1 for January, 2 for February,...,12 for December

4

Enter Number of hours volunteer worked

18

Enter Y if volunteer is Active in this team or else enter N

Y

Insert into Serve values (897145,'cambo',4,18,'Y')

SSN | T_Name | Month | No of hours | Active

897145|cambo|1|12|Y

678109|rambo|2|13|Y

178578|zambo|1|13|Y

178578|rambo|2|56|Y

459017|rambo|3|17|Y

126754|tambo|7|4|Y

126754|fambo|12|14|Y

897145|cambo|4|18|Y

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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

18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)

19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

4

Enter SSN of volunteer

678109

Enter Number of Teams this volunteer is associated with

1

Enter Team name volunteer is associated with:

fambo

Enter Month as integer: 1 for January, 2 for February,...,12 for December

8

Enter Number of hours volunteer worked

3

Enter Y if volunteer is Active in this team or else enter N

Y

Insert into Serve values (678109,'fambo',8,3,'Y')

SSN	T_Name	Month	No of hours	Active
897145	cambo	1	12	Y
678109	rambo	2	13	Y
178578	zambo	1	13	Y
178578	rambo	2	56	Y
459017	rambo	3	17	Y
126754	tambo	7	4	Y
126754	fambo	12	14	Y
897145	cambo	4	18	Y
678109	fambo	8	3	Y

 WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

4

Enter SSN of volunteer

178578

Enter Number of Teams this volunteer is associated with

1

Enter Team name volunteer is associated with:

zambo

Enter Month as integer: 1 for January, 2 for February,...,12 for December

6

Enter Number of hours volunteer worked

12

Enter Y if volunteer is Active in this team or else enter N

Y

Insert into Serve values (178578,'zambo',6,12,'Y')

SSN | T_Name | Month | No of hours | Active

897145|cambo|1|12|Y

678109|rambo|2|13|Y

178578|zambo|1|13|Y

178578|rambo|2|56|Y

459017|rambo|3|17|Y

126754|tambo|7|4|Y

126754|fambo|12|14|Y

897145|cambo|4|18|Y

678109|fambo|8|3|Y

178578|zambo|6|12|Y

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

4

Enter SSN of volunteer

459017

Enter Number of Teams this volunteer is associated with

1

Enter Team name volunteer is associated with:

rambo

Enter Month as integer: 1 for January, 2 for February,...,12 for December

7

Enter Number of hours volunteer worked

4

Enter Y if volunteer is Active in this team or else enter N

Y

Insert into Serve values (459017,'rambo',7,4,'Y')

SSN | T_Name | Month | No of hours | Active

897145|cambo|1|12|Y

678109|rambo|2|13|Y

459017|rambo|7|4|Y

```
178578|zambo|1|13|Y
178578|rambo|2|56|Y
459017|rambo|3|17|Y
126754|tambo|7|4|Y
126754|fambo|12|14|Y
897145|cambo|4|18|Y
678109|fambo|8|3|Y
178578|zambo|6|12|Y
```


WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

4

Enter SSN of volunteer

126754

Enter Number of Teams this volunteer is associated with

1

Enter Team name volunteer is associated with:

tambo

Enter Month as integer: 1 for January, 2 for February,...,12 for December

9

Enter Number of hours volunteer worked

5

Enter Y if volunteer is Active in this team or else enter N

Y

Insert into Serve values (126754,'tambo',9,5,'Y')

SSN | T_Name | Month | No of hours | Active

897145|cambo|1|12|Y

678109|rambo|2|13|Y

459017|rambo|7|4|Y

126754|tambo|9|5|Y

178578|zambo|1|13|Y

178578|rambo|2|56|Y

459017|rambo|3|17|Y

126754|tambo|7|4|Y

126754|fambo|12|14|Y

897145|cambo|4|18|Y

678109|fambo|8|3|Y

178578|zambo|6|12|Y

6.5. Scrip file showing the testing of query 5

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

5

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |  
HomeNumber | WorkNumber | CellNumber | MailingList  
126754|kang|1998-12-01|asian|Male|professor|deonne  
circle|kang@gmail.com|178645|198523|186732|Y  
897145|sridhar|1965-12-12|asian|Male|professor|david  
st|sridhar@gmail.com|189672|197572|794161|Y  
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
```

895712|david|1999-12-18|african|Male|Chef|ha
 st|david@gmail.com|189673|189673|189563|N
 457017|kristi|1980-12-19|american|Male|teacher|kr
 st|kristi@gmail.com|780145|91478|196782|Y
 178578|black|1990-12-17|american|Male|cook|sw
 st|black@gmail.com|189678|178925|267945|Y
 459017|white|1996-09-19|african|Male|teacher|gr
 st|white@gmail.com|1670916|167892|156792|N
 Enter 1 if Employee you are entering is a person in database or Enter 2 if Employee
 is not in the database

2

Enter SSN of Employee

136816

Enter name of Employee

harry

Enter the date of birth of Employee

month(mm):

1

day(dd):

15

year(yyyy):

1998

Enter Race of Employee

american

Enter Gender of Employee: Male/Female

Male

Enter profession of Employee

driver

Enter MailAddress of Employee

gt st

Enter Email of Employee

harry@gmail.com

Enter HomeNumber of Employee

178923

Enter WorkNumber of Employee

178923

Enter CellNumber of Employee

197025

Enter Y if Employee is in mailing list or else enter N

Y

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N
895712	david	1999-12-18	african	Male	Chef	ha st	david@gmail.com	189673	189673	189563	N
457017	kristi	1980-12-19	american	Male	teacher	kr st	kristi@gmail.com	780145	91478	196782	Y
136816	harry	1998-01-15	american	Male	driver	gt st	harry@gmail.com	178923	178923	197025	Y
178578	black	1990-12-17	american	Male	cook	sw st	black@gmail.com	189678	178925	267945	Y

459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter Number of Emergency Contacts this person has:
1
Enter name of Emergency contact
ha
Enter MailAddress of Emergency contact
drave st
Enter Email of Emergency contact
ha@gmail.com
Enter HomeNumber of Emergency contact
167902
Enter WorkNumber of Emergency contact
156829
Enter CellNumber of Emergency contact
567288
Enter Relation of Emergency contact
wife
SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation
126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
895712|da|sla st|da@gmail.com|189567|190672|189567|son
457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife
136816|ha|drave st|ha@gmail.com|167902|156829|567288|wife
178578|bla|ft st|bla@gmail.com|679145|678156|178025|daughter
459017|wh|ark st|wh@gmail.com|178902|178902|178923|son
Enter Salary of Employee
20000
Enter Marital status of employee (single/married/separated/divorced/widowed)
married
Enter the Hire date of employee
month(mm):
11
day(dd):
19
year(yyyy):
2016
SSN | Salary | Marital_Status | HireDate
136816|20000|married|2016-11-19
Enter Number of Teams this employee is associated with
1
Enter Team name Employee is associated with:
cambo
Enter the date when team reported
month(mm):
11
day(dd):
16
year(yyyy):
2016
Enter description of Report
good progress

Team Name | SSN | Report Date | Report Description
cambo|136816|2016-11-16|good progress

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

5

Enter 1 if Employee you are entering is a person in database or Enter 2 if Employee is not in the database

2

Enter SSN of Employee

675134

Enter name of Employee

wilson

Enter the date of birth of Employee
month(mm):
12
day(dd):
18
year(yyyy):
2000
Enter Race of Employee
american
Enter Gender of Employee: Male/Female
Female
Enter profession of Employee
president
Enter MailAddress of Employee
sr st
Enter Email of Employee
wilson@gmail.com
Enter HomeNumber of Employee
166782
Enter WorkNumber of Employee
981672
Enter CellNumber of Employee
981452
Enter Y if Employee is in mailing list or else enter N
Y
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter Number of Emergency Contacts this person has:
1
Enter name of Emergency contact
wil
Enter MailAddress of Emergency contact
sa st
Enter Email of Emergency contact
wil@gmail.com
Enter HomeNumber of Emergency contact
134561
Enter WorkNumber of Emergency contact

891562

Enter CellNumber of Emergency contact

875171

Enter Relation of Emergency contact

son

SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
Number | Relation

126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife

126754|ng|jy st|ng@gmail.com|908278|190856|190734|son

897145|sri|david st|sri@gmail.com|982014|198367|198267|wife

678109|ra|das st|ra@gmail.com|675147|91784|981674|wife

895712|da|sla st|da@gmail.com|189567|190672|189567|son

457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife

675134|wil|sa st|wil@gmail.com|134561|891562|875171|son

136816|ha|drave st|ha@gmail.com|167902|156829|567288|wife

178578|bla|ft st|bla@gmail.com|679145|678156|178025|daughter

459017|wh|ark st|wh@gmail.com|178902|178902|178923|son

Enter Salary of Employee

67000

Enter Marital status of employee (single/married/separated/divorced/widowed)

divorced

Enter the Hire date of employee

month(mm):

12

day(dd):

1

year(yyyy):

2014

SSN | Salary | Marital_Status | HireDate

675134|67000|divorced|2014-12-01

136816|20000|married|2016-11-19

Enter Number of Teams this employee is associated with

1

Enter Team name Employee is associated with:

fambo

Enter the date when team reported

month(mm):

12

day(dd):

12

year(yyyy):

2016

Enter description of Report

slow work

Team Name | SSN | Report Date | Report Description

fambo|675134|2016-12-12|slow work

cambo|136816|2016-11-16|good progress

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

5

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N
895712	david	1999-12-18	african	Male	Chef	ha st	david@gmail.com	189673	189673	189563	N
457017	kristi	1980-12-19	american	Male	teacher	kr st	kristi@gmail.com	780145	91478	196782	Y
675134	wilson	2000-12-18	american	Female	president	sr st	wilson@gmail.com	166782	981672	981452	Y
136816	harry	1998-01-15	american	Male	driver	gt st	harry@gmail.com	178923	178923	197025	Y
178578	black	1990-12-17	american	Male	cook	sw st	black@gmail.com	189678	178925	267945	Y

459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter 1 if Employee you are entering is a person in database or Enter 2 if Employee
is not in the database

1

Enter SSN of Employee

897145

Enter Salary of Employee

54000

Enter Marital status of employee (single/married/separated/divorced/widowed)

single

Enter the Hire date of employee

month(mm):

11

day(dd):

1

year(yyyy):

2000

SSN | Salary | Marital_Status | HireDate

675134|67000|divorced|2014-12-01

897145|54000|single|2000-11-01

136816|20000|married|2016-11-19

Enter Number of Teams this employee is associated with

1

Enter Team name Employee is associated with:

tambo

Enter the date when team reported

month(mm):

2

day(dd):

26

year(yyyy):

2016

Enter description of Report

less volunteers in team

Team Name | SSN | Report Date | Report Description

fambo|675134|2016-12-12|slow work

tambo|897145|2016-02-26|less volunteers in team

cambo|136816|2016-11-16|good progress

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

5

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
```

Enter 1 if Employee you are entering is a person in database or Enter 2 if Employee is not in the database

1

Enter SSN of Employee

178578

Enter Salary of Employee

78000

Enter Marital status of employee (single/married/separated/divorced/widowed)

separated

Enter the Hire date of employee

month(mm):

12

day(dd):

19

year(yyyy):

2010

SSN | Salary | Marital_Status | HireDate

675134|67000|divorced|2014-12-01

897145|54000|single|2000-11-01

178578|78000|separated|2010-12-19

136816|20000|married|2016-11-19

Enter Number of Teams this employee is associated with

1

Enter Team name Employee is associated with:

rambo

Enter the date when team reported

month(mm):

11

day(dd):

23

year(yyyy):

2016

Enter description of Report

many clients to this team

Team Name | SSN | Report Date | Report Description

fambo|675134|2016-12-12|slow work

tambo|897145|2016-02-26|less volunteers in team

rambo|178578|2016-11-23|many clients to this team

cambo|136816|2016-11-16|good progress

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

5

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
```

Enter 1 if Employee you are entering is a person in database or Enter 2 if Employee is not in the database

1

Enter SSN of Employee

459017

Enter Salary of Employee

34000

Enter Marital status of employee (single/married/separated/divorced/widowed)

single

Enter the Hire date of employee

month(mm):

5

day(dd):

15

```

year(yyyy):
2010
SSN | Salary | Marital_Status | HireDate
675134|67000|divorced|2014-12-01
897145|54000|single|2000-11-01
178578|78000|separated|2010-12-19
459017|34000|single|2010-05-15
136816|20000|married|2016-11-19
Enter Number of Teams this employee is associated with
1
Enter Team name Employee is associated with:
zambo
Enter the date when team reported
month(mm):
12
day(dd):
12
year(yyyy):
2014
Enter description of Report
good team
Team Name | SSN | Report Date | Report Description
fambo|675134|2016-12-12|slow work
tambo|897145|2016-02-26|less volunteers in team
rambo|178578|2016-11-23|many clients to this team
zambo|459017|2014-12-12|good team
cambo|136816|2016-11-16|good progress

```

6.6. Scrip file showing the testing of query 6

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the
volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should
be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list
and output them to a data file instead of screen (the user should be asked to enter
the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

6
Enter SSN of Employee whose expense is to be stored
675134
Enter Number of Expenses to be stored associated with this employee
1
Enter Expense date
month(mm):
3
day(dd):
```

30

year(yyyy):

2014

Enter Expense Amount: (integer value)

123

Enter Expense description

stationary

SSN | Exp date | Amount | Exp description

675134|2014-03-30|123|stationary

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

6

Enter SSN of Employee whose expense is to be stored

897145

Enter Number of Expenses to be stored associated with this employee

1

Enter Expense date

month(mm):

3

day(dd):

4

year(yyyy):

2010

Enter Expense Amount: (integer value)

340

Enter Expense description

camaign

SSN | Exp date | Amount | Exp description

675134|2014-03-30|123|stationary

897145|2010-03-04|340|camaign

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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

18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)

19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

6

Enter SSN of Employee whose expense is to be stored

178578

Enter Number of Expenses to be stored associated with this employee

1

Enter Expense date

month(mm):

6

day(dd):

16

year(yyyy):

2016

Enter Expense Amount: (integer value)

30

Enter Expense description

fuel

SSN | Exp date | Amount | Exp description

178578|2016-06-16|30|fuel

675134|2014-03-30|123|stationary

897145|2010-03-04|340|camaign

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

6

Enter SSN of Employee whose expense is to be stored

459017

Enter Number of Expenses to be stored associated with this employee

1

Enter Expense date

month(mm):

8

day(dd):

18

year(yyyy):

1008

Enter Expense Amount: (integer value)

80

Enter Expense description

flight tickets

SSN	Exp date	Amount	Exp description
-----	----------	--------	-----------------

178578	2016-06-16	30	fuel
--------	------------	----	------

459017	1008-08-18	80	flight tickets
--------	------------	----	----------------

675134	2014-03-30	123	stationary
--------	------------	-----	------------

897145	2010-03-04	340	camaign
--------	------------	-----	---------

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

6

Enter SSN of Employee whose expense is to be stored

136816

Enter Number of Expenses to be stored associated with this employee

1

Enter Expense date

month(mm):

5

day(dd):

15

year(yyyy):

2015

Enter Expense Amount: (integer value)

50

Enter Expense description

food

SSN	Exp date	Amount	Exp description
136816	2015-05-15	50	food
178578	2016-06-16	30	fuel
459017	1008-08-18	80	flight tickets
675134	2014-03-30	123	stationary
897145	2010-03-04	340	camaign

136816|2015-05-15|50|food

178578|2016-06-16|30|fuel

459017|1008-08-18|80|flight tickets

675134|2014-03-30|123|stationary

897145|2010-03-04|340|camaign

6.7. Scrip file showing the testing of query 7

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

7
Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous
Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database
2
Enter Organization name
bitcoin
Enter Mailing Address of Organization
da st
```

Enter name of Contact person

sai

Enter PhoneNumber of Organization

867134

Enter Y if organization makes Anonymous donations or else enter N

N

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

Enter Organization Type: 1 for Business, 2 for Church

1

Enter Business Type

cryptocurrency

Enter size of company

20

Enter company website

www.btc.com

Org. Name | Buss. type | Buss. size | Company website

bitcoin|cryptocurrency|20|www.btc.com

Enter Number of Teams this organization is associated with:

1

Enter Team name

rambo

Org. Name | Team Name

bitcoin|rambo

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

7

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

2

Enter Organization name

amazon

Enter Mailing Address of Organization

ama st

Enter name of Contact person

ahon

Enter PhoneNumber of Organization

346771

Enter Y if organization makes Anonymous donations or else enter N

Y

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

Enter Organization Type: 1 for Business, 2 for Church

1

Enter Business Type

retail

Enter size of company

40

Enter company website

www.amazon.com

Org. Name | Buss. type | Buss. size | Company website

bitcoin|cryptocurrency|20|www.btc.com

amazon|retail|40|www.amazon.com

Enter Number of Teams this organization is associated with:

1

Enter Team name

zambo

Org. Name | Team Name

amazon|zambo

bitcoin|rambo

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

7

Org.Name	Mailing Address	Contact Person	Phone Number	Anonymous
----------	-----------------	----------------	--------------	-----------

bitcoin	da st	sai	867134	N
---------	-------	-----	--------	---

amazon	ama st	ahon	346771	Y
--------	--------	------	--------	---

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

2

Enter Organization name

vatican

Enter Mailing Address of Organization

rome

Enter name of Contact person

pope

Enter PhoneNumber of Organization

156718

Enter Y if organization makes Anonymous donations or else enter N

N

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

Enter Organization Type: 1 for Business, 2 for Church

2

Enter Religious Affiliation of Church

cathelic

Org. Name | Religious Affiliation

vatican|cathelic

Enter Number of Teams this organization is associated with:

1

Enter Team name

tambo

Org. Name | Team Name

amazon|zambo

bitcoin|rambo

vatican|tambo

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June

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

18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

7

Org.Name	Mailing Address	Contact Person	Phone Number	Anonymous
bitcoin	da st	sai	867134	N
amazon	ama st	ahon	346771	Y
vatican	rome	pope	156718	N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

2

Enter Organization name

thomas

Enter Mailing Address of Organization

newyork st

Enter name of Contact person

gen

Enter PhoneNumber of Organization

178251

Enter Y if organization makes Anonymous donations or else enter N

N

Org.Name	Mailing Address	Contact Person	Phone Number	Anonymous
bitcoin	da st	sai	867134	N
amazon	ama st	ahon	346771	Y
vatican	rome	pope	156718	N
thomas	newyork st	gen	178251	N

Enter Organization Type: 1 for Business, 2 for Church

2

Enter Religious Affiliation of Church

christian

Org. Name | Religious Affiliation

vatican	cathelic
thomas	christian

Enter Number of Teams this organization is associated with:

1

Enter Team name

fambo

Org. Name | Team Name

amazon	zambo
bitcoin	rambo
thomas	fambo
vatican	tambo

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

7

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

thomas|newyork st|gen|178251|N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

2

Enter Organization name

microsoft

Enter Mailing Address of Organization

seattle st

Enter name of Contact person

gates

Enter PhoneNumber of Organization

871562

Enter Y if organization makes Anonymous donations or else enter N

N

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

thomas|newyork st|gen|178251|N

microsoft|seattle st|gates|871562|N

Enter Organization Type: 1 for Business, 2 for Church

1

Enter Business Type

computer

Enter size of company

60

Enter company website

www.microsoft.com

Org. Name | Buss. type | Buss. size | Company website

bitcoin|cryptocurrency|20|www.btc.com

amazon|retail|40|www.amazon.com

microsoft|computer|60|www.microsoft.com

Enter Number of Teams this organization is associated with:

1

Enter Team name

cambo

Org. Name | Team Name

amazon|zambo

bitcoin|rambo

microsoft|cambo

thomas|fambo

vatican|tambo

6.8. Scrip file showing the testing of query 8

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit
```

Please take care. The System is CASE-SENSITIVE

8

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N

```

895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
Enter 1 if Donor you are entering is a person in database or Enter 2 if Donor is not
in the database

```

2

Enter SSN of Donor

575671

Enter name of Donor

don

Enter the date of birth of Donor

month(mm):

3

day(dd):

3

year(yyyy):

1960

Enter Race of Donor

african

Enter Gender of Donor: Male/Female

Male

Enter profession of Donor

Mafia

Enter MailAddress of Donor

slake st

Enter Email of Donor

don@gmail.com

Enter HomeNumber of Donor

178651

Enter WorkNumber of Donor

987165

Enter CellNumber of Donor

197625

Enter Y if Donor is in mailing list or else enter N

Y

```

SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y

```

675134|wilson|2000-12-18|american|Female|president|sr
 st|wilson@gmail.com|166782|981672|981452|Y
 136816|harry|1998-01-15|american|Male|driver|gt
 st|harry@gmail.com|178923|178923|197025|Y
 178578|black|1990-12-17|american|Male|cook|sw
 st|black@gmail.com|189678|178925|267945|Y
 459017|white|1996-09-19|african|Male|teacher|gr
 st|white@gmail.com|1670916|167892|156792|N
 575671|don|1960-03-03|african|Male|Mafia|slake
 st|don@gmail.com|178651|987165|197625|Y
 Enter Number of Emergency Contacts this person has:

1

Enter name of Emergency contact

dono

Enter MailAddress of Emergency contact

slake st

Enter Email of Emergency contact

dono@gmail.com

Enter HomeNumber of Emergency contact

717761

Enter WorkNumber of Emergency contact

167261

Enter CellNumber of Emergency contact

187621

Enter Relation of Emergency contact

wife

SSN | Emer. Contact Name | Mail Address | Email | Home Number | Work Number | Cell
 Number | Relation

126754|ka|sw st|ka@gmail.com|189756|876235|94589|wife
 126754|ng|jy st|ng@gmail.com|908278|190856|190734|son
 897145|sri|david st|sri@gmail.com|982014|198367|198267|wife
 678109|ra|das st|ra@gmail.com|675147|91784|981674|wife
 895712|da|sla st|da@gmail.com|189567|190672|189567|son
 457017|kri|kr st|kri@gmail.com|180872|189056|179056|wife
 675134|wil|sa st|wil@gmail.com|134561|891562|875171|son
 136816|ha|drave st|ha@gmail.com|167902|156829|567288|wife
 178578|bla|ft st|bla@gmail.com|679145|678156|178025|daughter
 459017|wh|ark st|wh@gmail.com|178902|178902|178923|son
 575671|dono|slake st|dono@gmail.com|717761|167261|187621|wife

Enter Y if Donor makes Anonymous donations or else enter N

N

Donor SSN | Anonymous

575671|N

Enter Number of Donations made by this Donor

1

Enter date of donation

month(mm):

12

day(dd):

1

year(yyyy):

2000

Enter Amount Donated by Donor

1000

Enter Donation type

```

public
Enter name of Fund Raising Campaign
bigevent
SSN | Donation Date | Amount | Donation Type | Campaign
575671|2000-12-01|1000|public|bigevent
Enter mode of payment: 1 for card , 2 for check
1
Enter card number
12672655
Enter card Type
discover
Enter Expiry date on card
month(mm):
12
day(dd):
12
year(yyyy):
2018
SSN | Donation Date | Amount | Donation Type | Card No | Card Type | Exp.Date
575671|2000-12-01|1000|public|12672655|discover|2018-12-12
-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----
Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the
volunteer that has worked the most total hours between March and June
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

```

18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

8

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
575671|don|1960-03-03|african|Male|Mafia|slake
st|don@gmail.com|178651|987165|197625|Y
```

Enter 1 if Donor you are entering is a person in database or Enter 2 if Donor is not in the database

1

Enter SSN of Donor

675134

Enter Y if Donor makes Anonymous donations or else enter N

N

Donor SSN | Anonymous

575671|N

675134|N

Enter Number of Donations made by this Donor

2

Enter date of donation

month(mm):

1

day(dd):

1

year(yyyy):

2001

Enter Amount Donated by Donor

189

Enter Donation type

health

Enter name of Fund Raising Campaign

caring

SSN | Donation Date | Amount | Donation Type | Campaign

575671|2000-12-01|1000|public|bigevent

675134|2001-01-01|189|health|caring

Enter mode of payment: 1 for card , 2 for check

2

Enter check number

3153541

SSN | Donation Date | Amount | Donation Type | Check No

675134|2001-01-01|189|health|3153541

Enter date of donation

month(mm):

2

day(dd):

2

year(yyyy):

2002

Enter Amount Donated by Donor

156

Enter Donation type

research

Enter name of Fund Raising Campaign

globalresearch

SSN | Donation Date | Amount | Donation Type | Campaign

575671|2000-12-01|1000|public|bigevent

675134|2001-01-01|189|health|caring

675134|2002-02-02|156|research|globalresearch

Enter mode of payment: 1 for card , 2 for check

2

Enter check number

2341342

SSN | Donation Date | Amount | Donation Type | Check No

675134|2001-01-01|189|health|3153541

675134|2002-02-02|156|research|2341342

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

8

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
575671|don|1960-03-03|african|Male|Mafia|slake
st|don@gmail.com|178651|987165|197625|Y
Enter 1 if Donor you are entering is a person in database or Enter 2 if Donor is not
in the database
```

1

Enter SSN of Donor

126754

Enter Y if Donor makes Anonymous donations or else enter N

Y

Donor SSN | Anonymous

575671|N

675134|N

```

126754|Y
Enter Number of Donations made by this Donor
1
Enter date of donation
month(mm):
12
day(dd):
13
year(yyyy):
2016
Enter Amount Donated by Donor
1238
Enter Donation type
education
Enter name of Fund Raising Campaign
fullbright
SSN | Donation Date | Amount | Donation Type | Campaign
575671|2000-12-01|1000|public|bigevent
675134|2001-01-01|189|health|caring
675134|2002-02-02|156|research|globalresearch
126754|2016-12-13|1238|education|fullbright
Enter mode of payment: 1 for card , 2 for check
2
Enter check number
134521
SSN | Donation Date | Amount | Donation Type | Check No
126754|2016-12-13|1238|education|134521
675134|2001-01-01|189|health|3153541
675134|2002-02-02|156|research|2341342

```

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

8

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
575671|don|1960-03-03|african|Male|Mafia|slake
st|don@gmail.com|178651|987165|197625|Y
```

Enter 1 if Donor you are entering is a person in database or Enter 2 if Donor is not in the database

1

Enter SSN of Donor

678109

Enter Y if Donor makes Anonymous donations or else enter N

Y

Donor SSN | Anonymous

575671|N

675134|N

126754|Y

678109|Y

Enter Number of Donations made by this Donor

1

Enter date of donation

```

month(mm):
3
day(dd):
30
year(yyyy):
2010
Enter Amount Donated by Donor
78
Enter Donation type
research
Enter name of Fund Raising Campaign
globalresearch
SSN | Donation Date | Amount | Donation Type | Campaign
575671|2000-12-01|1000|public|bigevent
675134|2001-01-01|189|health|caring
675134|2002-02-02|156|research|globalresearch
126754|2016-12-13|1238|education|fullbright
678109|2010-03-30|78|research|globalresearch
Enter mode of payment: 1 for card , 2 for check
1
Enter card number
1562418
Enter card Type
amex
Enter Expiry date on card
month(mm):
12
day(dd):
12
year(yyyy):
2019
SSN | Donation Date | Amount | Donation Type | Card No | Card Type | Exp.Date
575671|2000-12-01|1000|public|12672655|discover|2018-12-12
678109|2010-03-30|78|research|1562418|amex|2019-12-12
-----
WELCOME TO THE DATABASE OF PAN
-----
Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

8

SSN	P_name	BirthDate	Race	Gender	Profession	MailAddress	Email	HomeNumber	WorkNumber	CellNumber	MailingList
126754	kang	1998-12-01	asian	Male	professor	deonne circle	kang@gmail.com	178645	198523	186732	Y
897145	sridhar	1965-12-12	asian	Male	professor	david st	sridhar@gmail.com	189672	197572	794161	Y
678109	ram	1998-12-18	latin	Male	cook	grat st	ram@gmail.com	686156	985675	678342	N
895712	david	1999-12-18	african	Male	Chef	ha st	david@gmail.com	189673	189673	189563	N
457017	kristi	1980-12-19	american	Male	teacher	kr st	kristi@gmail.com	780145	91478	196782	Y
675134	wilson	2000-12-18	american	Female	president	sr st	wilson@gmail.com	166782	981672	981452	Y
136816	harry	1998-01-15	american	Male	driver	gt st	harry@gmail.com	178923	178923	197025	Y
178578	black	1990-12-17	american	Male	cook	sw st	black@gmail.com	189678	178925	267945	Y
459017	white	1996-09-19	african	Male	teacher	gr st	white@gmail.com	1670916	167892	156792	N
575671	don	1960-03-03	african	Male	Mafia	slake st	don@gmail.com	178651	987165	197625	Y

Enter 1 if Donor you are entering is a person in database or Enter 2 if Donor is not in the database

1

Enter SSN of Donor

457017

Enter Y if Donor makes Anonymous donations or else enter N

N

Donor SSN | Anonymous

575671 | N

675134 | N

```

126754|Y
678109|Y
457017|N
Enter Number of Donations made by this Donor
1
Enter date of donation
month(mm):
8
day(dd):
18
year(yyyy):
2016
Enter Amount Donated by Donor
87
Enter Donation type
education
Enter name of Fund Raising Campaign
globaleducation
SSN | Donation Date | Amount | Donation Type | Campaign
575671|2000-12-01|1000|public|bigevent
675134|2001-01-01|189|health|caring
675134|2002-02-02|156|research|globalresearch
126754|2016-12-13|1238|education|fullbright
678109|2010-03-30|78|research|globalresearch
457017|2016-08-18|87|education|globaleducation
Enter mode of payment: 1 for card , 2 for check
2
Enter check number
1235231
SSN | Donation Date | Amount | Donation Type | Check No
126754|2016-12-13|1238|education|134521
457017|2016-08-18|87|education|1235231
675134|2001-01-01|189|health|3153541
675134|2002-02-02|156|research|2341342

```

6.9. Scrip file showing the testing of query 9

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

9
Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous
bitcoin|da st|sai|867134|N
amazon|ama st|ahon|346771|Y
vatican|rome|pope|156718|N
thomas|newyork st|gen|178251|N
microsoft|seattle st|gates|871562|N
Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database
```



```

1
Enter Organization name
bitcoin
Enter Number of Donations made by this Organization
1
Enter date of donation
month(mm):
3
day(dd):
3
year(yyyy):
2003
Enter Amount Donated by Donor
3000
Enter Donation type
research
Enter name of Fund Raising Campaign
globalresearch
Org. Name | Donation Date | Amount | Donation Type | Campaign
bitcoin|2003-03-03|3000|research|globalresearch
Enter mode of payment: 1 for card, 2 for check
2
Enter check number
1242751
Org. Name | Donation Date | Amount | Donation Type | Check No
bitcoin|2003-03-03|3000|research|1242751

```

```

-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----

```

```

Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

9

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

thomas|newyork st|gen|178251|N

microsoft|seattle st|gates|871562|N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

1

Enter Organization name

amazon

Enter Number of Donations made by this Organization

1

Enter date of donation

month(mm):

12

day(dd):

14

year(yyyy):

2016

Enter Amount Donated by Donor

4000

Enter Donation type

education

Enter name of Fund Raising Campaign

globaleducation

Org. Name | Donation Date | Amount | Donation Type | Campaign

amazon|2016-12-14|4000|education|globaleducation

bitcoin|2003-03-03|3000|research|globalresearch

Enter mode of payment: 1 for card, 2 for check

1

Enter card number

1324144

Enter card Type

amex

Enter Expiry date on card

month(mm):

1

day(dd):

1

year(yyyy):

2021

Org. Name | Donation Date | Amount | Donation Type | Card No | Card Type | Exp.Date
amazon|2016-12-14|4000|education|1324144|amex|2021-01-01

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

9

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous
bitcoin|da st|sai|867134|N

```

amazon|ama st|ahon|346771|Y
vatican|rome|pope|156718|N
thomas|newyork st|gen|178251|N
microsoft|seattle st|gates|871562|N
Enter 1 if Organization you are entering is in database or Enter 2 if Organization is
not in the database
1
Enter Organization name
vatican
Enter Number of Donations made by this Organization
1
Enter date of donation
month(mm):
3
day(dd):
14
year(yyyy):
2015
Enter Amount Donated by Donor
3470
Enter Donation type
globalpeace
Enter name of Fund Raising Campaign
bigevent
Org. Name | Donation Date | Amount | Donation Type | Campaign
amazon|2016-12-14|4000|education|globaleducation
vatican|2015-03-14|3470|globalpeace|bigevent
bitcoin|2003-03-03|3000|research|globalresearch
Enter mode of payment: 1 for card, 2 for check
2
Enter check number
1245127
Org. Name | Donation Date | Amount | Donation Type | Check No
bitcoin|2003-03-03|3000|research|1242751
vatican|2015-03-14|3470|globalpeace|1245127
-----
WELCOME TO THE DATABASE OF PAN
-----
Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

9

Org.Name	Mailing Address	Contact Person	Phone Number	Anonymous
bitcoin	da st	sai	867134	N
amazon	ama st	ahon	346771	Y
vatican	rome	pope	156718	N
thomas	newyork st	gen	178251	N
microsoft	seattle st	gates	871562	N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

1

Enter Organization name

microsoft

Enter Number of Donations made by this Organization

1

Enter date of donation

month(mm):

5

day(dd):

16

year(yyyy):

2015

Enter Amount Donated by Donor

12000

Enter Donation type

health

Enter name of Fund Raising Campaign

globalhealth

Org. Name	Donation Date	Amount	Donation Type	Campaign
amazon	2016-12-14	4000	education	globaleducation
vatican	2015-03-14	3470	globalpeace	bigevent

microsoft|2015-05-16|12000|health|globalhealth
bitcoin|2003-03-03|3000|research|globalresearch
Enter mode of payment: 1 for card, 2 for check

2

Enter check number

132413

Org. Name | Donation Date | Amount | Donation Type | Check No

bitcoin|2003-03-03|3000|research|1242751

microsoft|2015-05-16|12000|health|132413

vatican|2015-03-14|3470|globalpeace|1245127

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

9

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

thomas|newyork st|gen|178251|N

microsoft|seattle st|gates|871562|N

Enter 1 if Organization you are entering is in database or Enter 2 if Organization is not in the database

2

Enter Organization name

cisco

Enter Mailing Address of Organization

san st

Enter name of Contact person

ark

Enter PhoneNumber of Organization

156425

Enter Y if organization makes Anonymous donations or else enter N

N

Org.Name | Mailing Address | Contact Person | Phone Number | Anonymous

bitcoin|da st|sai|867134|N

amazon|ama st|ahon|346771|Y

vatican|rome|pope|156718|N

thomas|newyork st|gen|178251|N

microsoft|seattle st|gates|871562|N

cisco|san st|ark|156425|N

Enter Organization Type: 1 for Business, 2 for Church

1

Enter Business Type

networking

Enter size of company

15

Enter company website

www.cisco.com

Org. Name | Buss. type | Buss. size | Company website

bitcoin|cryptocurrency|20|www.btc.com

amazon|retail|40|www.amazon.com

microsoft|computer|60|www.microsoft.com

cisco|networking|15|www.cisco.com

Enter Number of Donations made by this Organization

1

Enter date of donation

month(mm):

4

day(dd):

17

year(yyyy):

2017

Enter Amount Donated by Donor

1280

Enter Donation type

research

Enter name of Fund Raising Campaign

globalresearch

Org. Name | Donation Date | Amount | Donation Type | Campaign
amazon|2016-12-14|4000|education|globaleducation
vatican|2015-03-14|3470|globalpeace|bigevent
microsoft|2015-05-16|12000|health|globalhealth
bitcoin|2003-03-03|3000|research|globalresearch
cisco|2017-04-17|1280|research|globalresearch
Enter mode of payment: 1 for card , 2 for check

2

Enter check number

19682572

Org. Name | Donation Date | Amount | Donation Type | Check No
bitcoin|2003-03-03|3000|research|1242751
cisco|2017-04-17|1280|research|19682572
microsoft|2015-05-16|12000|health|132413
vatican|2015-03-14|3470|globalpeace|1245127

6.10. Scrip file showing the testing of query 10

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit  
  
Please take care. The System is CASE-SENSITIVE  
  
10  
Enter SSN of Client whose Doctor's Name, Doctor's Number is to be retrieved:  
126754  
Doctor Name | Doctor Phone Number  
gray|786091  
-----  
-----  
WELCOME TO THE DATABASE OF PAN
```


Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

10

Enter SSN of Client whose Doctor's Name, Doctor's Number is to be retrieved:

457017

Doctor Name | Doctor Phone Number

quin|190562

6.11. Scrip file showing the testing of query 11

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

11
Enter start date of expense
month(mm):
1
day(dd):
1
year(yyyy):
2011
Enter end date of expense
```

```
month(mm):
12
day(dd):
12
year(yyyy):
2016
SSN | Total Expense
178578|30
136816|50
675134|123
```

```
-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----
```

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

```
11
Enter start date of expense
month(mm):
1
day(dd):
1
year(yyyy):
2010
Enter end date of expense
month(mm):
12
day(dd):
12
year(yyyy):
2016
SSN | Total Expense
178578|30
136816|50
675134|123
897145|340
```

6.12. Scrip file showing the testing of query 12

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

12
Enter SSN of Client to get list of SSN of volunteers
126754
SSN of volunteers
678109
459017
178578
-----
-----
```

WELCOME TO THE DATABASE OF PAN

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

12

Enter SSN of Client to get list of SSN of volunteers

895712

SSN of volunteers

126754

6.13. Scrip file showing the testing of query 13

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

13
Client Name | Mail Address | Email | Home Number | Work Number | Cell Number
kang|deonne circle|kang@gmail.com|178645|198523|186732
```


6.14. Scrip file showing the testing of query 14

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

14
Name | Total Amount | Anonymous
wilson|345|N
```

6.15. Scrip file showing the testing of query 15

```
-----
WELCOME TO THE DATABASE OF PAN
-----

Please Enter your option(1-20):
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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit
```

Please take care. The System is CASE-SENSITIVE

15

Vol.	Name	Mail Address	Email	Home Number	WorkNumber	Cell Number
white	gr st	white@gmail.com	1670916	167892	156792	
sridhar	david st	sridhar@gmail.com	189672	197572	794161	
black	sw st	black@gmail.com	189678	178925	267945	

6.16. Scrip file showing the testing of query 16

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

16

SSN | Salary before update

675134|67000

897145|54000

178578|78000

459017|34000

136816|20000

SSN | Salary after update

675134|67000

897145		54000
178578		78000
459017		34000
136816		20000

6.17. Scrip file showing the testing of query 17

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

17

SSN	Doctor Name	Doctor Number	Attorney Name	Attorney Number	Date Assigned
126754	gray	786091	attorn	92671	2016-12-18
897145	queen	189673	attorne	980167	1980-12-19
678109	doct	875634	anthony	190567	1990-12-18
895712	right	180767	att	180851	2001-12-01
457017	quin	190562	akaine	780178	1980-12-17
SSN	Doctor Name	Doctor Number	Attorney Name	Attorney Number	Date Assigned
126754	gray	786091	attorn	92671	2016-12-18

897145|queen|189673|attorne|980167|1980-12-19
678109|doct|875634|anthony|190567|1990-12-18
895712|right|180767|att|180851|2001-12-01
457017|quin|190562|akaine|780178|1980-12-17

6.18. Script file showing the testing of the import and export options

IMPORT:

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

18

Please enter the file path of the file to be imported

E:\Masters\DBMS\Individual Project\input.txt

Import completed

Team Name | Team type | Date Formed

zambo|Emergency|2014-09-15

rambo|NonEmergency|1993-03-03

tambo|NonEmergency|2016-10-24

fambo|Emergency|2013-09-30
cambo|NonEmergency|2017-03-30
team1|Emergency|2016-10-09
team2|NonEmergency|2013-12-15
team3|Emergency|2014-08-01
team4|NonEmergency|2015-05-04
team5|Emergency|2012-03-02

EXPORT:

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```


Please take care. The System is CASE-SENSITIVE

19

Please enter the file path of the file to export

E:\Masters\DBMS\Individual Project\output.txt

Export Completed- Printed into text file

6.19. Script file showing the testing of three types of errors

ERROR-1.

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

```
1  
Enter Team name  
rambo  
Enter Team type: Emergency/NonEmergency  
NonEmergency  
Enter the date when team was formed  
month(mm):
```

```

12
day(dd):
14
year(yyyy):
2000
java.sql.SQLIntegrityConstraintViolationException: ORA-00001: unique constraint
(KANN4040.SYS_C00216517) violated

    at oracle.jdbc.driver.T4CTTIOer.processError(T4CTTIOer.java:450)
    at oracle.jdbc.driver.T4CTTIOer.processError(T4CTTIOer.java:399)
    at oracle.jdbc.driver.T4C8Oall.processError(T4C8Oall.java:1059)
    at oracle.jdbc.driver.T4CTTIfun.receive(T4CTTIfun.java:522)
    at oracle.jdbc.driver.T4CTTIfun.doRPC(T4CTTIfun.java:257)
    at oracle.jdbc.driver.T4C8Oall.doOALL(T4C8Oall.java:587)
    at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:210)
    at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:30)
    at oracle.jdbc.driver.T4CStatement.executeForRows(T4CStatement.java:931)
    at
oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1150)
    at oracle.jdbc.driver.OracleStatement.executeQuery(OracleStatement.java:1309)
    at
oracle.jdbc.driver.OracleStatementWrapper.executeQuery(OracleStatementWrapper.java:42
2)
    at kanneganti.Saiteja.option1(Saiteja.java:162)
    at kanneganti.Saiteja.main(Saiteja.java:76)

```

ERROR-2

```

-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----
Please Enter your option(1-20):
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
period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

2

```
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList
126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
575671|don|1960-03-03|african|Male|Mafia|slake
st|don@gmail.com|178651|987165|197625|Y
```

Enter 1 if client you are entering is a person in database or Enter 2 if client is not in the database

1

Enter SSN of Client

146246

Enter Doctor Name of Client

wang

Enter Doctor Number of Client

34534

Enter Attorney Name of Client

Att

Enter Attorney Number of Client

455614

Enter the date when client was assigned to organization
month(mm):

1

day(dd):

14

year(yyyy):

2001

[java.sql.SQLIntegrityConstraintViolationException](#): ORA-02291: integrity constraint (KANN4040.SYS_C00216506) violated - parent key not found

Enter Number of Teams this client is associated with

```
at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:450)
at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:399)
at oracle.jdbc.driver.T4C8Oall.processError(T4C8Oall.java:1059)
at oracle.jdbc.driver.T4CTTIfun.receive(T4CTTIfun.java:522)
at oracle.jdbc.driver.T4CTTIfun.doRPC(T4CTTIfun.java:257)
at oracle.jdbc.driver.T4C8Oall.doOALL(T4C8Oall.java:587)
at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:210)
at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:30)
at oracle.jdbc.driver.T4CStatement.executeForRows(T4CStatement.java:931)
at
oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1150)
at oracle.jdbc.driver.OracleStatement.executeQuery(OracleStatement.java:1309)
at
oracle.jdbc.driver.OracleStatementWrapper.executeQuery(OracleStatementWrapper.java:42
2)
at kanneganti.Saiteja.option2(Saiteja.java:211)
at kanneganti.Saiteja.main(Saiteja.java:79)
```

ERROR -3

```
-----
-----
WELCOME TO THE DATABASE OF PAN
-----
-----
```

Please Enter your option(1-20):

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 period of time. 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. For each team, retrieve the name and associated contact information of the volunteer that has worked the most total hours between March and June
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
18. Import: Enter new teams from a data file until the file is empty (the user should be asked to enter the input file name)
19. Export: Retrieve names and mailing addresses of all people on the mailing list and output them to a data file instead of screen (the user should be asked to enter the output file name)
20. Quit

Please take care. The System is CASE-SENSITIVE

1

Enter Team name

alpha

Enter Team type: Emergency/NonEmergency

Emergency

Enter the date when team was formed

month(mm):

1

day(dd):

13

year(yyyy):

2013

[java.sql.SQLException](#): ORA-00942: table or view does not exist

```

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:450)
at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:399)
at oracle.jdbc.driver.T4C8Oall.processError(T4C8Oall.java:1059)
at oracle.jdbc.driver.T4CTTIfun.receive(T4CTTIfun.java:522)
at oracle.jdbc.driver.T4CTTIfun.doRPC(T4CTTIfun.java:257)
at oracle.jdbc.driver.T4C8Oall.doOALL(T4C8Oall.java:587)
at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:210)
at oracle.jdbc.driver.T4CStatement.doOall8(T4CStatement.java:30)
at oracle.jdbc.driver.T4CStatement.executeForRows(T4CStatement.java:931)
at
oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1150)
at oracle.jdbc.driver.OracleStatement.executeQuery(OracleStatement.java:1309)
at
oracle.jdbc.driver.OracleStatementWrapper.executeQuery(OracleStatementWrapper.java:42
2)
at kanneganti.Saiteja.option1(Saiteja.java:162)

```

at kanneganti.Saiteja.main([Saiteja.java:76](#))

ERROR-4

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit
```

Please take care. The System is CASE-SENSITIVE

3
SSN | P_name | BirthDate | Race | Gender | Profession | MailAddress | Email |
HomeNumber | WorkNumber | CellNumber | MailingList

```

126754|kang|1998-12-01|asian|Male|professor|deonne
circle|kang@gmail.com|178645|198523|186732|Y
897145|sridhar|1965-12-12|asian|Male|professor|david
st|sridhar@gmail.com|189672|197572|794161|Y
678109|ram|1998-12-18|latin|Male|cook|grat st|ram@gmail.com|686156|985675|678342|N
895712|david|1999-12-18|african|Male|Chef|ha
st|david@gmail.com|189673|189673|189563|N
457017|kristi|1980-12-19|american|Male|teacher|kr
st|kristi@gmail.com|780145|91478|196782|Y
675134|wilson|2000-12-18|american|Female|president|sr
st|wilson@gmail.com|166782|981672|981452|Y
136816|harry|1998-01-15|american|Male|driver|gt
st|harry@gmail.com|178923|178923|197025|Y
178578|black|1990-12-17|american|Male|cook|sw
st|black@gmail.com|189678|178925|267945|Y
459017|white|1996-09-19|african|Male|teacher|gr
st|white@gmail.com|1670916|167892|156792|N
575671|don|1960-03-03|african|Male|Mafia|slake
st|don@gmail.com|178651|987165|197625|Y
Enter 1 if volunteer you are entering is a person in database or Enter 2 if volunteer
is not in the database
1
Enter SSN of volunteer
detrd
Exception in thread "main" java.lang.NumberFormatException: For input string: "detrd"
    at java.lang.NumberFormatException.forInputString(Unknown Source)
    at java.lang.Integer.parseInt(Unknown Source)
    at java.lang.Integer.parseInt(Unknown Source)
    at kanneganti.Saiteja.option3(Saiteja.java:520)
    at kanneganti.Saiteja.main(Saiteja.java:82)

```


6.20. Script file showing the testing of the quit option

```
-----  
-----  
WELCOME TO THE DATABASE OF PAN  
-----  
-----  
Please Enter your option(1-20):  
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  
period of time. 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. For each team, retrieve the name and associated contact information of the  
volunteer that has worked the most total hours between March and June  
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  
18. Import: Enter new teams from a data file until the file is empty (the user should  
be asked to enter the input file name)  
19. Export: Retrieve names and mailing addresses of all people on the mailing list  
and output them to a data file instead of screen (the user should be asked to enter  
the output file name)  
20. Quit  
  
Please take care. The System is CASE-SENSITIVE  
  
20  
Thank You for using the Program
```