```
INSERT INTO Branch (Branch_id, Name, Address)
VALUES ('23895', 'Woodbridge', '221 Glenwood Ave Woodbridge 08830');
```

1.
```
Create table bank.branch (
    Branch_id INT PRIMARY KEY,
    Name VARCHAR (255) NOT NULL,
    Address VARCHAR (255) NOT NULL
);
```

2.
```
Create table bank.customer(
    SSN INT PRIMARY KEY,
    First_name VARCHAR(255) NOT NULL,
    Last_name VARCHAR(255) NOT NULL,
    Address VARCHAR(255) NOT NULL,
    Email VARCHAR(255) NOT NULL,
    Phone_num VARCHAR(20) NOT NULL,
    Branch_id INT,
    FOREIGN KEY (Branch_id) references branch(Branch_id),
    Date_of_birth Date NOT NULL
);
```

3.
```
Create table bank.banker(
    Branch_id INT,
    FOREIGN KEY (Branch_id) references branch(Branch_id),
    Banker_id INT PRIMARY KEY,
    First_name VARCHAR(255) NOT NULL,
    Last_name VARCHAR(255) NOT NULL,
    Address VARCHAR(255) NOT NULL,
    Email VARCHAR(255) NOT NULL,
    Phone_num VARCHAR(20) NOT NULL,
    Date_of_birth Date NOT NULL,
    SSN INT,
    FOREIGN KEY (SSN) references customer(SSN)
);
```

4.
```
Create table bank.loans(
    Loan_id INT PRIMARY KEY,
    Loan_amount INT NOT NULL,
```

```
   Banker_id INT,
   FOREIGN KEY (Banker_id) references banker(Banker_id),
   SSN INT,
   FOREIGN KEY (SSN) references customer(SSN)
);
```

5.
```
Create table bank.account(
   Account_num INT PRIMARY KEY,
   Routing_num INT NOT NULL,
   Balance INT NOT NULL,
   Checking_or_savings VARCHAR(8) NOT NULL,
   SSN INT,
   FOREIGN KEY (SSN) references customer(SSN)
);

Create table bank.pay_or_receieve (
   Transaction_id INT,
   foreign key (Transaction_id) references transaction(Transaction_id),
   Pay_or_receieve VARCHAR(8) NOT NULL,
   Receiver_account_num INT NOT NULL,
   Amount REAL NOT NULL,
   Account_num INT,
   foreign key (Account_num) references account(Account_num)
);
```

6.
```
Create table bank.pay/recieve(
   Transaction_id INT,
   Receiver_account_num
   Amount INT,
   Account_num INT,
```

7.
```
Create table bank.deposit/withdraw(
   Transaction_id INT,
   Amount INT,
   Account_num INT,
```

8.
```
Create table bank.transfer(
   Transaction_id INT,
   Amount INT,
```

Account_num INT,

9.
Create table bank.transaction(
    Transaction_id INT PRIMARY KEY,
    Tranaction_type
    Date DATE

PART 2:
1.
INSERT INTO branch (Branch_id, Name, Address)
VALUES ('23895', 'Woodbridge', '221 Glenwood Ave Woodbridge 08830');
INSERT INTO branch (Branch_id, Name, Address)
VALUES ('45632', 'Farmington', '13D Grandview Way 06032');
INSERT INTO Branch (Branch_id, Name, Address)
VALUES (75632", 'Hartford', '61 Block Drive 07102');
INSERT INTO Branch (Branch_id, Name, Address)
VALUES (89064", 'Edison', '42 Kansas Drive 06043');
INSERT INTO Branch (Branch_id, Name, Address)
VALUES ('34621', 'Newark', '67 Yonder Drive 09302');

SELECT * FROM Branch

2.

INSERT INTO customer (SSN,First_name , Last_name,Address,Email,Phone_num,Branch_id,
Date_of_birth)
VALUES (042-13-5933','Kee','Mason','39 Crest Drive
09802','km45@gmail.com','860-786-7890','23895','08-04-1993');
INSERT INTO customer (SSN,First_name , Last_name,Address,Email,Phone_num,Branch_id,
Date_of_birth)
VALUES ('040-12-5963','George','Bun','34 Moon Drive
09802','sbv3@gmail.com','860-785-9032','45632','08-09-1995');
INSERT INTO customer (SSN,First_name , Last_name,Address,Email,Phone_num,Branch_id,
Date_of_birth)
VALUES ('040-28-2563','Sam','Cohen','40 Grandview Drive','svc2@gmail.com','860-903-7867',
'75632','03-02-1990');
INSERT INTO customer (SSN,First_name , Last_name,Address,Email,Phone_num,Branch_id,
Date_of_birth)
VALUES('408-11-7597','Krish','Bedi','43 Mohawk Drive
06032','krs2@gmail.com','860-256-9356', '89064','03-19-2004');

INSERT INTO customer (SSN,First_name , Last_name,Address,Email,Phone_num,Branch_id, Date_of_birth)
VALUES ('238-87-3637','Shiva','Modugus','42 Street Drive 09302', 'kelton_trembl@gmail.com', '34621','02-19-2003');

SELECT * FROM Customer

4.
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
VALUES ('4456709', '25000','23895', '238873637');
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
VALUES ('33456', '20000', ''45632', '042135933');
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
VALUES ('993452', '200','75632' '040125963');
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
VALUES ('8890123', '5000','89064' '040125963');
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
VALUES ('2389551', '7500','34621','040282563');

SELECT * FROM Loans

5.

INSERT INTO Account (Account_num, Routing_num, Checking_or_savings,Balance,SSN)
VALUES ('238955', '2500','890322','Checking', '238873637');
INSERT INTO Account (Account_num, Routing_num, Checking_or_savings,Balance,SSN)
VALUES ('238956', '2500','890323', 'savings', ''042135933');
INSERT INTO Account (Account_num, Routing_num, Checking_or_savings,Balance,SSN)
VALUES ('238957', '2500','890324', 'Checking', '042135933');
INSERT INTO Account (Account_num, Routing_num, Checking_or_savings,Balance,SSN)
VALUES ('238958', '2500','890325', 'savings', '040125963');
INSERT INTO Account (Account_num, Routing_num, Checking_or_savings,Balance,SSN)
VALUES ('238959', '2500','890326', 'checkings', '040282563');

SELECT * FROM Account

6.

INSERT INTO Pay/Receive (Transaction_id, Pay_or_recieve, Receiever_account_num, Amount, Account_num)
VALUES ('238955', 'Pay','','', '');

INSERT INTO Pay/Receive (Transaction_id, Pay_or_recieve, Receiever_account_num, Amount, Account_num)
VALUES ('238956', 'Pay','890323', 'savings', ''042135933');
INSERT INTO Pay/Receive (Transaction_id, Pay_or_recieve, Receiever_account_num, Amount, Account_num)
VALUES ('238957', 'Pay','890324', 'Checking', '042135933');
INSERT INTO Pay/Receive (Transaction_id, Pay_or_recieve, Receiever_account_num, Amount, Account_num)
VALUES ('238958', '2500','890325', 'savings', '040125963');
INSERT INTO Pay/Receive (Transaction_id, Pay_or_recieve, Receiever_account_num, Amount, Account_num)
VALUES ('238955','Receive',);

SELECT * FROM Account

7.

8.

INSERT INTO Transfer (Transaction_id, Amount, Account_num)
VALUES ('238955', '2500','890321');
INSERT INTO Transfer (Transaction_id, Amount, Account_num)
VALUES ('238956', '5000','567482');
INSERT INTO Transfer (Transaction_id, Amount, Account_num)
VALUES ('238957', '7500','657221);
INSERT INTO Transfer (Transaction_id, Amount, Account_num)
VALUES ('238958', '6700','678920');
INSERT INTO Transfer (Transaction_id, Amount, Account_num)
VALUES ('238959', '13000', '789012);

SELECT * FROM Transfer

9.

INSERT INTO Transaction (Transaction_id, Date)
VALUES ('238955', '2001-09-19');
INSERT INTO Transaction (Transaction_id, Date)
VALUES ('238956', '2003-08-16');
INSERT INTO Transaction (Transaction_id, Date)
VALUES ('238957', '2005-07-14');
INSERT INTO Transaction (Transaction_id, Date)

```
VALUES ('238958','1992-06-13');
INSERT INTO Transaction (Transaction_id, Date)
VALUES ('238958'','1990-05-10');

SELECT * FROM Transaction
```

Part 3:

```
INSERT INTO customer(SSN,First_name,Last_name,Address,Email,Phone_num,Date_of_birth,
Branch_id)
SELECT '238873637', 'Shiva', 'Modugus', '42 Street Driver 09302', 'kelton_trembl@gmail.com',
'908-616-6274','2003-02-19',
Branch_id FROM branch
WHERE Name = 'Woodbridge'
 LIMIT 1

INSERT INTO customer(SSN,First_name,Last_name,Address,Email,Phone_num,Date_of_birth,
Branch_id)
SELECT '042135933', 'Kee','Mason', '39 Crest Drive 09802',
'km45@gmail.com','860-786-7890','1993-04-18', Branch_id
  FROM branch
 WHERE Name = 'Woodbridge'
 LIMIT 1


INSERT INTO customer(SSN,First_name,Last_name,Address,Email,Phone_num,Date_of_birth,
Branch_id)
```

```
SELECT '040125963', 'George', 'Bun', '34 Moon Drive 09802', 'sbv3@gmail.com',
'860-785-9032','45632', '1995-09-18', Branch_id
  FROM branch
 WHERE Name = 'Woodbridge'
 LIMIT 1

INSERT INTO customer(SSN,First_name,Last_name,Address,Email,Phone_num,Date_of_birth,
Branch_id)
SELECT '040282563','Sam','Cohen','40 Grandview Drive','svc2@gmail.com','860-903-7867',
'75632','1992'-02-17, Branch_id
  FROM branch
 WHERE Name = 'Woodbridge'
 LIMIT 1


INSERT INTO customer(SSN,First_name,Last_name,Address,Email,Phone_num,Date_of_birth,
Branch_id)
SELECT '238873637', 'Shiva', 'Modugus', '42 Street Driver 09302', 'kelton_trembl@gmail.com',
'908-616-6274','2003-02-19', Branch_id
  FROM branch
 WHERE Name = 'Woodbridge'
 LIMIT 1
```

Branch:

UPDATE Branch
SET Name = 'Garcia'
DELETE FROM Branch WHERE Address = '43 Mohawk Drive';

Customer:

SET FOREIGN_KEY_CHECKS=0;
UPDATE CUSTOMER
SET Phone_num = '9083447978';
DELETE FROM CUSTOMER WHERE First_name = 'Shiva';

Banker:

UPDATE BANKER
Set First_Name = 'Juan'
DELETE FROM BANKER WHERE Last_name = 'Harris';

Loans:

UPDATE LOANS
SET Loan_Amount = '50000'
DELETE FROM Loans WHERE loan_amount < '25000';

Account:

UPDATE ACCOUNT
SET Balance= '9900'
DELETE FROM Account WHERE Balance <= '900';

Pay_Or_Receive:

UPDATE Pay_Or_Receive
SET Amount = '9000'
DELETE FROM Pay_Or_Receive WHERE Account_num = '789049';

Deposit/Withdraw:

UPDATE DEPOSIT/WITHDRAW
SET TRANSACTION_ID = '238946'
DELETE FROM DEPOSIT/WITHDRAW WHERE Amount = '1000';

Transfer:

UPDATE Transfer
SET Amount = '4000'
DELETE FROM Transfer WHERE transaction_id = '238955';

Transaction:

UPDATE Transaction
SET Transaction_id= '239855'
DELETE FROM Transaction WHERE Date = '2005-07-14';

Banker:

```
INSERT INTO banker (Banker_id,First_Name,Last_Name,Address, Email,
Phone_num,Date_of_birth,Branch_id, SSN)
SELECT '11115','Michelle', 'Harris', '3844 Drainer Avenue 32401','ronny.mora8@hotmail.com',
'321-316-4696', '1973-01-17', b.Branch_id, c.SSN
FROM branch AS b
CROSS JOIN customer AS c
WHERE b.`Name` = 'Woodbridge'
AND c.First_name = 'Michelle'

Loans:
INSERT INTO Loans (Loan_id, Loan_Amount,Banker_id,SSN)
SELECT '4523129','9560',b.Banker_id,c.SSN
  FROM banker AS b
CROSS JOIN customer AS c

Pay_or_receieve: receive
INSERT INTO pay_or_receieve (Pay_or_receieve,
Receiver_account_num,Amount,Transaction_id, Account_num)
SELECT 'receive','23346','2000',t.Transaction_id,a.Account_num
  FROM transaction AS t
CROSS JOIN account AS a
WHERE t.Transaction_id = '6'
AND a.Account_num = '12341'

Deposit or withdraw:
INSERT INTO deposit_or_withdraw
(Deposit_or_withdraw,Savings_withdraw_left,Amount,Transaction_id, Account_num)
SELECT 'withdraw','4','2000',t.Transaction_id,a.Account_num
  FROM transaction AS t
CROSS JOIN account AS a
WHERE t.Transaction_id = '10'
AND a.Account_num = '12345'




WHERE b.First_name = 'Sam'
AND c.First_name = 'Shiva'
```

```
1-
SELECT COUNT(loan_id), Banker_id
FROM Loans
GROUP BY Banker_id

2-
SELECT AVG(Balance), Checking_or_savings
FROM Account
GROUP BY Checking_or_savings
HAVING AVG(Balance) > 2000;

3-
SELECT count(banker_id)
FROM banker
WHERE Address IN (
SELECT Address
FROM Branch
WHERE name= 'Woodbridge');



SELECT count(Banker_id)
FROM banker
WHERE Name IN (
SELECT Name
FROM Branch
WHERE Name= 'Woodbridge');



4-
SELECT First_name
From customer
Where SSN = ALL
(SELECT SSN
FROM account
Where Balance =238794.12);
```