```sql
CREATE TABLE Banks (
    BankCode INT PRIMARY KEY,
    Name VARCHAR(50),
    Address VARCHAR(100),
    Phone VARCHAR(15)
);

CREATE TABLE Branches (
    BranchCode INT PRIMARY KEY,
    Name VARCHAR(50),
    Address VARCHAR(100),
    Phone VARCHAR(15),
    BankCode INT,
    FOREIGN KEY (BankCode) REFERENCES Banks(BankCode)
);

CREATE TABLE Customers (
    SSN INT PRIMARY KEY,
    Name VARCHAR(50),
    Address VARCHAR(100),
    Phone VARCHAR(15),
    Age INT
);

CREATE TABLE Accounts (
    AccountNumber INT PRIMARY KEY,
    BranchCode INT,
    AccountType VARCHAR(20),
    Balance DECIMAL(10, 2),
    FOREIGN KEY (BranchCode) REFERENCES Branches(BranchCode)
);

CREATE TABLE AccountCustomers (
    AccountNumber INT,
    SSN INT,
    FOREIGN KEY (AccountNumber) REFERENCES Accounts(AccountNumber),
    FOREIGN KEY (SSN) REFERENCES Customers(SSN)
);

CREATE TABLE Loans (
    LoanNumber INT PRIMARY KEY,
    Duration INT,
    InterestRate DECIMAL(5, 2)
);

CREATE TABLE LoanCustomers (
    LoanNumber INT,
    SSN INT,
```

```
    FOREIGN KEY (LoanNumber) REFERENCES Loans(LoanNumber),
    FOREIGN KEY (SSN) REFERENCES Customers(SSN)
);
```

```
INSERT INTO Banks (BankCode, Name, Address, Phone) VALUES
(1, 'SBI', 'Mumbai', '111-111-1111'),
(2, 'HDFC', 'Delhi', '222-222-2222');
```

```
INSERT INTO Branches (BranchCode, Name, Address, Phone, BankCode) VALUES
(101, 'SBI Main', 'Bangalore', '123-456-7890', 1),
(102, 'HDFC Central', 'Bangalore', '098-765-4321', 2),
(103, 'SBI North', 'Bangalore', '555-555-5555', 1);
```

```
INSERT INTO Customers (SSN, Name, Address, Phone, Age) VALUES
(201, 'John Doe', 'Bangalore', '333-333-3333', 30),
(202, 'Jane Smith', 'Mumbai', '444-444-4444', 40),
(203, 'Alice Johnson', 'Bangalore', '666-666-6666', 25);
```

```
INSERT INTO Accounts (AccountNumber, BranchCode, AccountType, Balance) VALUES
(301, 101, 'Savings', 5000),
(302, 102, 'Savings', 7000),
(303, 103, 'Savings', 6000);
```

```
INSERT INTO AccountCustomers (AccountNumber, SSN) VALUES
(301, 201),
(301, 202),
(302, 203),
(303, 201);
```

```
INSERT INTO Loans (LoanNumber, Duration, InterestRate) VALUES
(401, 5, 7.5),
(402, 3, 6.5);
```

```
INSERT INTO LoanCustomers (LoanNumber, SSN) VALUES
(401, 201),
(402, 202),
(402, 203);
```

a) **List the details of customers who have a joint account and also have at least one loan.**

sql
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```sql
SELECT DISTINCT c.*
```

```sql
FROM Customers c
JOIN AccountCustomers ac ON c.SSN = ac.SSN
JOIN (
    SELECT AccountNumber
    FROM AccountCustomers
    GROUP BY AccountNumber
    HAVING COUNT(SSN) > 1
) joint_accounts ON ac.AccountNumber = joint_accounts.AccountNumber
JOIN LoanCustomers lc ON c.SSN = lc.SSN;
```

b) List the details of the branch which has given the maximum loan.

sql
Copy code
```sql
SELECT b.*
FROM Branches b
JOIN Accounts a ON b.BranchCode = a.BranchCode
JOIN AccountCustomers ac ON a.AccountNumber = ac.AccountNumber
JOIN LoanCustomers lc ON ac.SSN = lc.SSN
JOIN Loans l ON lc.LoanNumber = l.LoanNumber
GROUP BY b.BranchCode
ORDER BY SUM(l.InterestRate * l.Duration) DESC
LIMIT 1;
```

c) List the details of savings accounts opened in the SBI branches located in Bangalore.

sql
Copy code
```sql
SELECT a.*
FROM Accounts a
JOIN Branches b ON a.BranchCode = b.BranchCode
JOIN Banks bn ON b.BankCode = bn.BankCode
WHERE bn.Name = 'SBI' AND b.Address LIKE '%Bangalore%' AND
a.AccountType = 'Savings';
```

d) List the name of the branch along with its bank name and the total amount of loans given by it.

sql
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```sql
SELECT b.Name AS BranchName, bn.Name AS BankName, SUM(l.InterestRate
* l.Duration) AS TotalLoanAmount
FROM Branches b
JOIN Banks bn ON b.BankCode = bn.BankCode
JOIN Accounts a ON b.BranchCode = a.BranchCode
JOIN AccountCustomers ac ON a.AccountNumber = ac.AccountNumber
JOIN LoanCustomers lc ON ac.SSN = lc.SSN
JOIN Loans l ON lc.LoanNumber = l.LoanNumber
GROUP BY b.Name, bn.Name;
```

e) **Retrieve the names of customers who have accounts in all the branches located in a specific city (e.g., Bangalore).**

sql
Copy code
```sql
SELECT c.Name
FROM Customers c
JOIN AccountCustomers ac ON c.SSN = ac.SSN
JOIN Accounts a ON ac.AccountNumber = a.AccountNumber
JOIN Branches b ON a.BranchCode = b.BranchCode
WHERE b.Address LIKE '%Bangalore%'
GROUP BY c.SSN, c.Name
HAVING COUNT(DISTINCT b.BranchCode) = (
    SELECT COUNT(*)
    FROM Branches
    WHERE Address LIKE '%Bangalore%'
);
```