-- Create the employee table

CREATE TABLE employee (

ID INT PRIMARY KEY,

person\_name VARCHAR(255),

street VARCHAR(255),

city VARCHAR(255));

-- Create the works table

CREATE TABLE works (

ID INT,

company\_name VARCHAR(255),

salary DECIMAL,

FOREIGN KEY (ID) REFERENCES employee(ID),

FOREIGN KEY (company\_name) REFERENCES company(company\_name));

-- Create the company table

CREATE TABLE company (

company\_name VARCHAR(255) PRIMARY KEY,

city VARCHAR(255));

-- Create the manages table

CREATE TABLE manages (

ID INT,

manager\_id INT,

FOREIGN KEY (ID) REFERENCES employee(ID),

FOREIGN KEY (manager\_id) REFERENCES employee(ID));

-- Create the branch table

CREATE TABLE branch (

branch\_name VARCHAR(255) PRIMARY KEY,

branch\_city VARCHAR(255),

assets DECIMAL);

-- Create the customer table

CREATE TABLE customer (

ID INT PRIMARY KEY,

customer\_name VARCHAR(255),

customer\_street VARCHAR(255),

customer\_city VARCHAR(255));

-- Create the loan table

CREATE TABLE loan (

loan\_number INT PRIMARY KEY,

branch\_name VARCHAR(255),

amount DECIMAL,

FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name));

-- Create the borrower table

CREATE TABLE borrower (

ID INT,

loan\_number INT,

FOREIGN KEY (ID) REFERENCES customer(ID),

FOREIGN KEY (loan\_number) REFERENCES loan(loan\_number));

-- Create the account table

CREATE TABLE account (

account\_number INT PRIMARY KEY,

branch\_name VARCHAR(255),

balance DECIMAL,

FOREIGN KEY (branch\_name) REFERENCES branch(branch\_name)

);

-- Create the depositor table

CREATE TABLE depositor (

ID INT,

account\_number INT,

FOREIGN KEY (ID) REFERENCES customer(ID),

FOREIGN KEY (account\_number) REFERENCES

Find the ID of each customer of the bank who has an account but not a loan.

SELECT DISTINCT C.ID

FROM customer C

JOIN account A ON C.ID = A.ID

WHERE C.ID NOT IN (SELECT DISTINCT B.ID FROM borrower B);

Find the ID of each customer who lives on the same street and in the same city as customer '12345'.

sql

SELECT ID

FROM customer

WHERE customer\_street = (SELECT customer\_street FROM customer WHERE ID = '12345')

AND customer\_city = (SELECT customer\_city FROM customer WHERE ID = '12345');

Find the name of each branch that has at least one customer who has an account in the bank and who lives in “Harrison”.

sql

SELECT branch\_name

FROM branch

WHERE branch\_name IN (

SELECT b.branch\_name

FROM account a

JOIN depositor d ON a.account\_number = d.account\_number

JOIN customer c ON d.ID = c.ID

JOIN branch b ON a.branch\_name = b.branch\_name

WHERE c.customer\_city = 'Harrison');

Q2)

SELECT

day,

qty,

SUM(qty) OVER (ORDER BY day ASC) AS cumQty

5FROM

demand;

Q3)

| **product** | **day** | **qty** | **RN** |
| --- | --- | --- | --- |
| A | 2 | 6 | 1 |
| A | 4 | 9 | 2 |
| B | 3 | 3 | 1 |
| B | 4 | 6 | 2 |