

DDL STATEMENTS

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DROP TABLE HOLDS;
DROP TABLE MANAGES;
DROP TABLE TAKES_OUT;
DROP TABLE DEPENDENT;
DROP TABLE CUSTOMER;
DROP TABLE LOAN;
DROP TABLE OVERDRAFT;
DROP TABLE TRANSACTION;
DROP TABLE ASSETS;
DROP TABLE ACCOUNT;
DELETE FROM EMPLOYEE;
DELETE FROM BRANCH;
ALTER TABLE EMPLOYEE DROP CONSTRAINT Branch;
DROP TABLE BRANCH;
DROP TABLE EMPLOYEE;

CREATE TABLE EMPLOYEE(
    ssn CHAR(9) NOT NULL,
    Fname VARCHAR(15) NOT NULL,
    Minit CHAR(1),
    Lname VARCHAR(20) NOT NULL,
    managerSSN CHAR(9),
    assistantManagerSSN CHAR(9),
    branchID VARCHAR(5),
    startDate DATE DEFAULT CURRENT_DATE NOT NULL,
    phoneNo CHAR(10),
    sex CHAR(1),
    dob DATE,
    salary DECIMAL(15, 2),
    street VARCHAR(20),
    state CHAR(2),
    city VARCHAR(1250),
    zipCode CHAR(5),
    PRIMARY KEY (ssn)
);

CREATE TABLE BRANCH (
    branchID VARCHAR(5) NOT NULL,
    street VARCHAR(20) NOT NULL,
    state CHAR(2) NOT NULL,
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    city VARCHAR(25) NOT NULL,
    zipCode CHAR(5) NOT NULL,
    managerSSN CHAR(9),
    assistantManagerSSN CHAR(9),
    phoneNo CHAR(10),
    PRIMARY KEY (branchID),
    FOREIGN KEY (managerSSN) REFERENCES EMPLOYEE(ssn) ON DELETE SET
NULL,
    FOREIGN KEY (assistantManagerSSN) REFERENCES EMPLOYEE(ssn) ON
DELETE SET NULL
);

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CREATE TABLE ASSETS (
    branchID VARCHAR(5) NOT NULL,
    assetName VARCHAR(50) NOT NULL,
    PRIMARY KEY (branchID, assetName),
    FOREIGN KEY (branchID) REFERENCES BRANCH(branchID) ON DELETE
CASCADE);

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CREATE TABLE LOAN(
loanNo CHAR(5) NOT NULL,
amount DECIMAL(15, 2) NOT NULL,
branchID VARCHAR(5) NOT NULL,
repaymentAmount DECIMAL(15, 2) NOT NULL,
PRIMARY KEY(loanNo),
FOREIGN KEY(branchID) REFERENCES BRANCH(branchID) ON DELETE CASCADE);

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CREATE TABLE DEPENDENT(
dependentName VARCHAR(15) NOT NULL,
essn CHAR(9) NOT NULL,
sex CHAR(1),
dob DATE,
PRIMARY KEY (dependentName, essn),
FOREIGN KEY (essn) REFERENCES EMPLOYEE (ssn) ON DELETE CASCADE);

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CREATE TABLE CUSTOMER(
ssn CHAR(9) NOT NULL,
Fname VARCHAR(15) NOT NULL,
Minit CHAR(1),
Lname VARCHAR(20) NOT NULL,
aptNo INT,
street VARCHAR(20) NOT NULL,
state CHAR(2) NOT NULL,
city VARCHAR(25) NOT NULL,
zip CHAR(5) NOT NULL,

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Essln CHAR(9) NOT NULL,
branchID VARCHAR(5),
PRIMARY KEY (ssn),
FOREIGN KEY (Esslн) REFERENCES EMPLOYEE (ssn),
FOREIGN KEY (branchID) REFERENCES BRANCH(branchID) ON DELETE SET
NULL);

CREATE TABLE ACCOUNT(
accountNo CHAR(5) NOT NULL,
balance DECIMAL(15, 2) DEFAULT 0 NOT NULL ,
Type VARCHAR(25) NOT NULL,
fixedInterestRate DECIMAL(5, 4),
variableInterestRate DECIMAL(5, 4),
accessDate DATE DEFAULT CURRENT_DATE NOT NULL ,
PRIMARY KEY (accountNo));

CREATE TABLE MANAGES(
customerSSN CHAR(9) NOT NULL,
accountNo CHAR(5) NOT NULL,
PRIMARY KEY (customerSSN, accountNo),
FOREIGN KEY (customerSSN) REFERENCES CUSTOMER (ssn) ON DELETE
CASCADE,
FOREIGN KEY (accountNo) REFERENCES ACCOUNT (accountNo) ON DELETE
CASCADE);

CREATE TABLE TRANSACTION(
accountNo CHAR(5) NOT NULL,
code CHAR(5) NOT NULL,
name CHAR(2) NOT NULL,
amount DECIMAL(15, 2) NOT NULL,
transaction_time TIMESTAMP DEFAULT CURRENT_TIMESTAMP NOT NULL,
transaction_date DATE DEFAULT CURRENT_DATE NOT NULL,
charge NUMBER(1) NOT NULL,
PRIMARY KEY (code),
FOREIGN KEY (accountNo) REFERENCES ACCOUNT(accountNo) ON DELETE
CASCADE);

CREATE TABLE HOLDS(
accountNo CHAR(5) NOT NULL,
loanNo CHAR(5) NOT NULL,
PRIMARY KEY (accountNo, loanNo),
FOREIGN KEY (accountNo) REFERENCES ACCOUNT(accountNo) ON DELETE
CASCADE,
FOREIGN KEY (loanNo) REFERENCES LOAN(loanNo) ON DELETE CASCADE);

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CREATE TABLE OVERDRAFT(
accountNo CHAR(5) NOT NULL,
amount DECIMAL(15, 2) NOT NULL,
PRIMARY KEY (accountNo, amount),
FOREIGN KEY (accountNo) REFERENCES ACCOUNT(accountNo) ON DELETE CASCADE);

CREATE TABLE TAKES_OUT(
customerSSN CHAR(9) NOT NULL,
loanNo CHAR(5) NOT NULL,
PRIMARY KEY (customerSSN, loanNo),
FOREIGN KEY (customerSSN) REFERENCES CUSTOMER(ssn) ON DELETE CASCADE,
FOREIGN KEY (loanNo) REFERENCES LOAN(loanNo) ON DELETE CASCADE);

```

Alterations/Constraints

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ALTER TABLE EMPLOYEE ADD CONSTRAINT Emp_Mgr FOREIGN KEY (managerSSN)
REFERENCES EMPLOYEE(Ssn)
ON DELETE SET NULL;
ALTER TABLE EMPLOYEE ADD CONSTRAINT Emp_Asst_Mgr FOREIGN KEY
(assistantManagerSSN) REFERENCES EMPLOYEE(Ssn)
ON DELETE SET NULL;
ALTER TABLE EMPLOYEE ADD CONSTRAINT Branch FOREIGN KEY (branchID)
REFERENCES BRANCH(branchID)
ON DELETE CASCADE;

```

Records to Insert

```

INSERT INTO BRANCH (branchID, street, state, city, zipCode,
managerSSN, assistantManagerSSN, phoneNo)
VALUES
('B001', '123 Elm St', 'NY', 'New York', '10001', NULL, NULL,
'5551234567');

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INSERT INTO BRANCH (branchID, street, state, city, zipCode,
managerSSN, assistantManagerSSN, phoneNo)
VALUES
('B002', '456 Bern St', 'NJ', 'New Jersey', '90001', NULL, NULL,
'5559876543');

```

```
INSERT INTO BRANCH (branchID, street, state, city, zipCode,
managerSSN, assistantManagerSSN, phoneNo)
VALUES
('B003', '789 Pine St', 'TX', 'Los Angeles', '75201', NULL, NULL,
'5552345678');

INSERT INTO BRANCH (branchID, street, state, city, zipCode,
managerSSN, assistantManagerSSN, phoneNo)
VALUES
('B004', '101 Maple St', 'FL', 'Miami', '33101', NULL, NULL,
'5553456789');

INSERT INTO BRANCH (branchID, street, state, city, zipCode,
managerSSN, assistantManagerSSN, phoneNo)
VALUES
('B005', '202 Birch St', 'IL', 'Chicago', '60601', NULL, NULL,
'5554567890');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('123456789', 'John', 'A', 'Doe', NULL, NULL, 'B001',
TO_DATE('2020-01-15', 'YYYY-MM-DD'), '5551234567', 'M',
TO_DATE('1985-05-12', 'YYYY-MM-DD'), 85000.00, '123 Elm St', 'NY',
'New York', '10001');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname,
managerSSN,assistantManagerSSN, branchID, startDate, phoneNo, sex,
dob, salary, street, state, city, zipCode)
VALUES
('234567890', 'Jane', 'B', 'Smith', Null, Null, 'B001',
TO_DATE('2021-02-10', 'YYYY-MM-DD'), '5555678901', 'F',
TO_DATE('1990-07-22', 'YYYY-MM-DD'), 65000.00, '456 Oak St', 'NY',
'New York', '10002');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('345678901', 'Alice', 'C', 'Johnson', Null, Null, 'B001',
TO_DATE('2022-03-25', 'YYYY-MM-DD'), '5559876543', 'F',
TO_DATE('1992-10-30', 'YYYY-MM-DD'), 55000.00, '789 Pine St', 'NY',
'New York', '10003');
```

```
INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('456789012', 'Michael', 'D', 'Brown', NULL, NULL, 'B002',
TO_DATE('2021-06-15', 'YYYY-MM-DD'), '5553456789', 'M',
TO_DATE('1983-02-20', 'YYYY-MM-DD'), 90000.00, '321 Birch St', 'NY',
'Brooklyn', '11201');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('567890123', 'Laura', 'E', 'Taylor', NULL, NULL, 'B002',
TO_DATE('2021-07-01', 'YYYY-MM-DD'), '5558765432', 'F',
TO_DATE('1987-03-17', 'YYYY-MM-DD'), 70000.00, '654 Maple St', 'NY',
'Brooklyn', '11202');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('678901234', 'David', 'F', 'Wilson', NULL, NULL, 'B002',
TO_DATE('2022-04-30', 'YYYY-MM-DD'), '5555432109', 'M',
TO_DATE('1995-01-28', 'YYYY-MM-DD'), 60000.00, '987 Cedar Ave', 'NY',
'Brooklyn', '11203');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('789012345', 'William', 'G', 'Davis', NULL, NULL, 'B003',
TO_DATE('2020-11-20', 'YYYY-MM-DD'), '5556789123', 'M',
TO_DATE('1980-08-15', 'YYYY-MM-DD'), 95000.00, '789 Pine St', 'NY',
'Queens', '11301');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('890123456', 'Olivia', 'H', 'Miller', NULL, NULL, 'B003',
TO_DATE('2021-09-10', 'YYYY-MM-DD'), '5552345678', 'F',
TO_DATE('1992-05-03', 'YYYY-MM-DD'), 72000.00, '234 Oak Rd', 'NY',
'Queens', '11302');
```

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INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('901234567', 'Sophia', 'I', 'Anderson', NULL, NULL, 'B003',
TO_DATE('2022-01-05', 'YYYY-MM-DD'), '5556543210', 'F',
TO_DATE('1994-12-12', 'YYYY-MM-DD'), 63000.00, '567 Maple Rd', 'NY',
'Queens', '11303');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('555666777', 'John', 'J', 'Lee', NULL, NULL, 'B004',
TO_DATE('2021-04-25', 'YYYY-MM-DD'), '5551234987', 'M',
TO_DATE('1987-11-11', 'YYYY-MM-DD'), 98000.00, '123 Oak St', 'NY',
'Manhattan', '10004');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('888999111', 'Evelyn', 'K', 'Young', NULL, NULL, 'B004',
TO_DATE('2021-05-01', 'YYYY-MM-DD'), '5555678901', 'F',
TO_DATE('1990-09-10', 'YYYY-MM-DD'), 75000.00, '456 Elm St', 'NY',
'Manhattan', '10005');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('101010101', 'James', 'L', 'Walker', NULL, NULL, 'B004',
TO_DATE('2022-06-14', 'YYYY-MM-DD'), '5559876543', 'M',
TO_DATE('1996-03-02', 'YYYY-MM-DD'), 68000.00, '789 Birch St', 'NY',
'Manhattan', '10006');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
('898989899', 'Michael', 'M', 'Taylor', NULL, NULL, 'B005',
TO_DATE('2020-12-01', 'YYYY-MM-DD'), '5554321987', 'M',
TO_DATE('1982-04-10', 'YYYY-MM-DD'), 97000.00, '987 Cedar St', 'NY',
'Staten Island', '10301');
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INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
    ('123123123', 'Grace', 'N', 'Jackson', NULL, NULL, 'B005',
TO_DATE('2021-08-15', 'YYYY-MM-DD'), '5558765432', 'F',
TO_DATE('1994-06-25', 'YYYY-MM-DD'), 71000.00, '654 Maple Ave', 'NY',
'Staten Island', '10302');

INSERT INTO EMPLOYEE (ssn, Fname, Minit, Lname, managerSSN,
assistantManagerSSN, branchID, startDate, phoneNo, sex, dob, salary,
street, state, city, zipCode)
VALUES
    ('456456456', 'Liam', 'O', 'Scott', NULL, NULL, 'B005',
TO_DATE('2022-09-05', 'YYYY-MM-DD'), '5555432109', 'M',
TO_DATE('1993-11-17', 'YYYY-MM-DD'), 64000.00, '321 Pine Ave', 'NY',
'Staten Island', '10303');

INSERT INTO LOAN (loanNo, amount, branchID, repaymentAmount)
VALUES
    ('L001', 10000.00, 'B001', 12000.00);
INSERT INTO LOAN (loanNo, amount, branchID, repaymentAmount)
VALUES
    ('L002', 15000.00, 'B002', 18000.00);
INSERT INTO LOAN (loanNo, amount, branchID, repaymentAmount)
VALUES
    ('L003', 20000.00, 'B003', 24000.00);
INSERT INTO LOAN (loanNo, amount, branchID, repaymentAmount)
VALUES
    ('L004', 25000.00, 'B004', 30000.00);
INSERT INTO LOAN (loanNo, amount, branchID, repaymentAmount)
VALUES
    ('L005', 30000.00, 'B005', 36000.00);

INSERT INTO ASSETS (branchID, assetName)
VALUES
    ('B001', 'ATM Machine');
INSERT INTO ASSETS (branchID, assetName)
VALUES
    ('B002', 'Computer');
INSERT INTO ASSETS (branchID, assetName)
VALUES
    ('B003', 'Jewels');
INSERT INTO ASSETS (branchID, assetName)

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VALUES
('B004', 'Gold');
INSERT INTO ASSETS (branchID, assetName)
VALUES
('B005', 'Silver');

INSERT INTO DEPENDENT
VALUES
('Bill', '123456789', 'M', TO_DATE('2010-06-15', 'YYYY-MM-DD'));
INSERT INTO DEPENDENT
VALUES
('Jill', '456789012', 'F', TO_DATE('2012-08-22', 'YYYY-MM-DD'));
INSERT INTO DEPENDENT
VALUES
('Emma', '789012345', 'F', TO_DATE('2015-03-30', 'YYYY-MM-DD'));
INSERT INTO DEPENDENT
VALUES
('Joey', '123456789', 'M', TO_DATE('2018-10-01', 'YYYY-MM-DD'));
INSERT INTO DEPENDENT
VALUES
('Bob', '567890123', 'M', TO_DATE('2020-11-10', 'YYYY-MM-DD'));

INSERT INTO CUSTOMER (ssn, Fname, Minit, Lname, aptNo, street, state,
city, zip, Essn, branchID)
VALUES
('444555666', 'Alice', 'L', 'Brown', 101, '123 Elm St', 'NY', 'New
York', '10001', '345678901', 'B001');
INSERT INTO CUSTOMER (ssn, Fname, Minit, Lname, aptNo, street, state,
city, zip, Essn, branchID)
VALUES
('777888999', 'Bob', 'K', 'Green', 202, '456 Oak St', 'CA', 'Los
Angeles', '90001', '678901234', 'B002');
INSERT INTO CUSTOMER (ssn, Fname, Minit, Lname, aptNo, street, state,
city, zip, Essn, branchID)
VALUES
('888999666', 'Charlie', 'J', 'White', 303, '789 Pine St', 'TX',
'Dallas', '75201', '901234567', 'B003');
INSERT INTO CUSTOMER (ssn, Fname, Minit, Lname, aptNo, street, state,
city, zip, Essn, branchID)
VALUES
('111222333', 'David', 'R', 'Black', 404, '101 Maple St', 'FL',
'Miami', '33101', '345678901', 'B004');

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```
INSERT INTO CUSTOMER (ssn, Fname, Minit, Lname, aptNo, street, state,
city, zip, Essn, branchID)
VALUES
('444555777', 'Eve', 'T', 'Pink', 505, '202 Birch St', 'IL',
'Chicago', '60601', '789012345', 'B005');

INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1001', 101234.67, 'Checking Account', NULL, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1002', 1567.25, 'Savings Account', 0.0025, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1003', 5999.00, 'Money Market', NULL, .0425, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1004', 567.04, 'Loan Account', .023, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1005', 123.43, 'Loan Account', .02, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1006', 891.56, 'Loan Account', .03, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1007', 200.99, 'Loan Account', .004, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1008', 2000.04, 'Loan Account', .005, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
('A1009', 356.19, 'Savings Account', .05, NULL, CURRENT_DATE);
INSERT INTO ACCOUNT (accountNo, balance, type, fixedInterestRate,
variableInterestRate, accessDate)
VALUES
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('A1010', 10.50, 'Checking Account', NULL, NULL, CURRENT_DATE);

INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('444555666', 'A1001');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('444555666', 'A1005');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('777888999', 'A1002');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('777888999', 'A1006');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('888999666', 'A1003');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('888999666', 'A1007');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('111222333', 'A1004');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('111222333', 'A1010');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('444555777', 'A1008');
INSERT INTO MANAGES (customerSSN, accountNo)
VALUES
('444555777', 'A1009');

INSERT INTO TRANSACTION (accountNo, code, name, amount,
transaction_time, transaction_date, charge)
VALUES
('A1001', 'C001', 'WD', 100.00, TO_TIMESTAMP('2024-11-13 09:00:00',
'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2024-01-10', 'YYYY-MM-DD'), 1);
INSERT INTO TRANSACTION (accountNo, code, name, amount,
transaction_time, transaction_date, charge)
VALUES
('A1002', 'C002', 'CD', 200.00, TO_TIMESTAMP('2024-11-13 10:00:00',
'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2024-03-14', 'YYYY-MM-DD'), 0);
INSERT INTO TRANSACTION (accountNo, code, name, amount,
transaction_time, transaction_date, charge)
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VALUES
('A1003', 'C003', 'WD', 300.00, TO_TIMESTAMP('2024-11-13 11:00:00',
'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2024-08-13', 'YYYY-MM-DD'), 1);
INSERT INTO TRANSACTION (accountNo, code, name, amount,
transaction_time, transaction_date, charge)
VALUES
('A1009', 'C004', 'CD', 400.00, TO_TIMESTAMP('2024-11-13 12:00:00',
'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2024-11-13', 'YYYY-MM-DD'), 0);
INSERT INTO TRANSACTION (accountNo, code, name, amount,
transaction_time, transaction_date, charge)
VALUES
('A1010', 'C005', 'WD', 500.00, TO_TIMESTAMP('2024-11-13 13:00:00',
'YYYY-MM-DD HH24:MI:SS'), TO_DATE('2024-07-25', 'YYYY-MM-DD'), 1);

INSERT INTO HOLDS (accountNo, loanNo)
VALUES
('A1004', 'L001');
INSERT INTO HOLDS (accountNo, loanNo)
VALUES
('A1005', 'L002');
INSERT INTO HOLDS (accountNo, loanNo)
VALUES
('A1006', 'L003');
INSERT INTO HOLDS (accountNo, loanNo)
VALUES
('A1007', 'L004');
INSERT INTO HOLDS (accountNo, loanNo)
VALUES
('A1008', 'L005');

INSERT INTO OVERDRAFT (accountNo, amount)
VALUES
('A1001', 500.00);
INSERT INTO OVERDRAFT (accountNo, amount)
VALUES
('A1002', 1000.00);
INSERT INTO OVERDRAFT (accountNo, amount)
VALUES
('A1003', 750.00);
INSERT INTO OVERDRAFT (accountNo, amount)
VALUES
('A1010', 15.00);
INSERT INTO OVERDRAFT (accountNo, amount)
VALUES
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('A1009', 1500.00);

INSERT INTO TAKES_OUT (customerSSN, loanNo)
VALUES
('111222333', 'L001');
INSERT INTO TAKES_OUT (customerSSN, loanNo)
VALUES
('444555666', 'L002');
INSERT INTO TAKES_OUT (customerSSN, loanNo)
VALUES
('777888999', 'L003');
INSERT INTO TAKES_OUT (customerSSN, loanNo)
VALUES
('888999666', 'L004');
INSERT INTO TAKES_OUT (customerSSN, loanNo)
VALUES
('444555777', 'L005');

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UPDATE/DELETE STATEMENTS

```
UPDATE BRANCH SET managerSSN = '123456789' WHERE BRANCHID = 'B001';
UPDATE BRANCH SET assistantManagerSSN = '234567890' WHERE BRANCHID =
'B001';
UPDATE BRANCH SET managerSSN = '456789012' WHERE BRANCHID = 'B002';
UPDATE BRANCH SET assistantManagerSSN = '567890123' WHERE BRANCHID =
'B002';
UPDATE BRANCH SET managerSSN = '789012345' WHERE BRANCHID = 'B003';
UPDATE BRANCH SET assistantManagerSSN = '890123456' WHERE BRANCHID =
'B003';
UPDATE BRANCH SET managerSSN = '555666777' WHERE BRANCHID = 'B004';
UPDATE BRANCH SET assistantManagerSSN = '888999111' WHERE BRANCHID =
'B004';
UPDATE BRANCH SET managerSSN = '898989899' WHERE BRANCHID = 'B005';
UPDATE BRANCH SET assistantManagerSSN = '123123123' WHERE BRANCHID =
'B005';

UPDATE EMPLOYEE SET assistantManagerSSN = '234567890' WHERE SSN =
'123456789';
UPDATE EMPLOYEE SET managerSSN = '123456789' WHERE SSN = '234567890';
UPDATE EMPLOYEE SET managerSSN = '123456789', assistantManagerSSN =
'234567890' WHERE SSN = '345678901';
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```
UPDATE EMPLOYEE SET assistantManagerSSN = '234567890' WHERE ssn =
'123456789';
UPDATE EMPLOYEE SET managerSSN = '123456789' WHERE ssn = '234567890';
UPDATE EMPLOYEE SET managerSSN = '123456789', assistantManagerSSN =
'234567890' WHERE ssn = '345678901';
UPDATE EMPLOYEE SET assistantManagerSSN = '345678901' WHERE ssn =
'456789012';
UPDATE EMPLOYEE SET managerSSN = '456789012' WHERE ssn = '567890123';
UPDATE EMPLOYEE SET managerSSN = '456789012', assistantManagerSSN =
'567890123' WHERE ssn = '678901234';
UPDATE EMPLOYEE SET assistantManagerSSN = '678901234' WHERE ssn =
'789012345';
UPDATE EMPLOYEE SET managerSSN = '789012345' WHERE ssn = '890123456';
UPDATE EMPLOYEE SET managerSSN = '789012345', assistantManagerSSN =
'890123456' WHERE ssn = '901234567';
UPDATE EMPLOYEE SET assistantManagerSSN = '901234567' WHERE ssn =
'555666777';
UPDATE EMPLOYEE SET managerSSN = '555666777' WHERE ssn = '888999111';
UPDATE EMPLOYEE SET managerSSN = '555666777', assistantManagerSSN =
'888999111' WHERE ssn = '101010101';
UPDATE EMPLOYEE SET assistantManagerSSN = '101010101' WHERE ssn =
'898989899';
UPDATE EMPLOYEE SET managerSSN = '898989899' WHERE ssn = '123123123';
UPDATE EMPLOYEE SET managerSSN = '898989899', assistantManagerSSN =
'123123123' WHERE ssn = '456456456';

UPDATE ASSETS SET ASSETNAME = 'Coin Collection' WHERE BRANCHID =
'B001' AND ASSETNAME = 'ATM Machine';
UPDATE DEPENDENT SET DEPENDENTNAME = 'Jessica' WHERE DEPENDENTNAME =
'Emma' AND ESSN = '789012345';
UPDATE CUSTOMER SET STREET = '100 Grove Ave' WHERE SSN = '444555666';
UPDATE ACCOUNT SET BALANCE = 99999 WHERE ACCOUNTNO = 'A1001';
UPDATE MANAGES SET CUSTOMERSSN = '777888999' WHERE CUSTOMERSSN =
'444555666' AND ACCOUNTNO = 'A1005';
UPDATE TRANSACTION SET AMOUNT = 5000 WHERE ACCOUNTNO = 'A1009' AND
CODE = 'C004';
UPDATE HOLDS SET ACCOUNTNO = 'A1007' WHERE ACCOUNTNO = 'A1004' AND
LOANNO = 'L001';
UPDATE OVERDRAFT SET AMOUNT = 150 WHERE ACCOUNTNO = 'A1010' AND
AMOUNT = 15;
UPDATE TAKES_OUT SET CUSTOMERSSN = '777888999' WHERE CUSTOMERSSN =
'111222333' AND LOANNO = 'L001';
UPDATE LOAN SET REPAYMENTAMOUNT = '10000' WHERE LOANNO = 'L002';

DELETE FROM EMPLOYEE WHERE SSN = '123456789';
```

```
DELETE FROM BRANCH WHERE BRANCHID = 'B004';
DELETE FROM ASSETS WHERE ASSETNAME = 'Computer' AND BRANCHID =
'B002';
DELETE FROM DEPENDENT WHERE DEPENDENTNAME = 'Jill' AND ESSN =
'456789012';
DELETE FROM CUSTOMER WHERE SSN = '444555777';
DELETE FROM ACCOUNT WHERE ACCOUNTNO = 'A1010';
DELETE FROM MANAGES WHERE CUSTOMERSSN = '444555666' AND ACCOUNTNO =
'A1001';
DELETE FROM TRANSACTION WHERE CODE = 'C004';
DELETE FROM HOLDS WHERE ACCOUNTNO = 'A1006' AND LOANNO = 'L003';
DELETE FROM OVERDRAFT WHERE ACCOUNTNO = 'A1003' AND AMOUNT = 750;
DELETE FROM TAKES_OUT WHERE CUSTOMERSSN = '444555666' AND LOANNO =
'L002';
DELETE FROM LOAN WHERE LOANNO = 'L001';
```

QUERIES

```
/* Calculate the total value of accounts associated with each branch */
*/
```

```
SELECT B.BranchID, SUM(A.BALANCE) AS Total_Account_Value
FROM ACCOUNT A, MANAGES M, CUSTOMER C, BRANCH B
WHERE A.ACCOUNTNO = M.ACCOUNTNO AND M.CUSTOMERSSN = C.SSN AND
C.BRANCHID = B.BRANCHID
GROUP BY B.BranchID;
```

```
/* Only display the branches with employees that have more than 1
dependent and the number of dependents*/
```

```
SELECT B.BranchID, COUNT(*) as Number_of_Dependents
FROM BRANCH B, Employee E, Dependent D
WHERE B.BranchID = E.BranchID AND D.ESSN = E.SSN
GROUP BY B.BranchID
HAVING COUNT(*) > 1;
```

```
/* Select the employees salaries higher than all of the employees in
Branch 1 */
```

```
SELECT E.SSN, E.FNAME, E.SALARY, E.BRANCHID
FROM EMPLOYEE E
```

```
WHERE E.SALARY > ALL
      (SELECT SALARY
       FROM EMPLOYEE
       WHERE BranchID = 'B001');

/* Select the customers that have Loan Accounts */

SELECT C.SSN, C.FNAME, C.LNAME, M.ACCTNO
FROM CUSTOMER C, MANAGES M
WHERE C.SSN = M.CUSTOMERSSN AND M.ACCTNO IN
      (SELECT ACCOUNTNO
       FROM ACCOUNT
       WHERE TYPE = 'Loan Account');
```