



Our database would be used by banks and clients of the bank to prevent fraud and to recognize any unrecognized transactions. Once they login they would be able to see their banking information like cheque and savings and how much money they have and see their transaction history with date and time. Banks use this database to track client accounts, balances, and deposits. Databases may be used by retail shops to hold information on inventory, sales, customers, and prices. They can use that database to make sure that each bank branch has its own copy of the most up-to-date customer information. Instead of sending the information to a central server, the bank copies the information about the customer's account. This lets the bank keep track of and process each transaction. Since each bank branch has its own copy of the most up-to-date customer information, it costs less to run a distributed database management system.

```
CREATE TABLE "User"(  
    USER_ID VARCHAR(10) PRIMARY KEY,  
    USER_NAME VARCHAR(30),  
    USER_ADDRESS VARCHAR (50),  
    USER_EMAIL VARCHAR(20),  
    USER_PHONE_NUMBER VARCHAR(15),  
    USER_LOGIN VARCHAR(20),  
    USER_PASSWORD VARCHAR(20)  
);
```

```
CREATE TABLE "Merchant"(  
    MER_ID VARCHAR(10) PRIMARY KEY,  
    MER_NAME VARCHAR(30),  
    MER_ADDRESS VARCHAR(50),  
    MER_EMAIL VARCHAR(20),  
    MER_PHONE_NUMBER VARCHAR(15)  
);
```

```
CREATE TABLE "Product_Type"(  
    PROD_TYPE_CODE VARCHAR(10) PRIMARY KEY,  
    PROD_TYPE_DETAILS VARCHAR(10)  
);
```

```
CREATE TABLE "Product"(  
    PROD_ID VARCHAR(10) PRIMARY KEY,  
    PROD_DETAILS VARCHAR(10),  
    MER_ID VARCHAR(10),  
    PROD_TYPE_CODE VARCHAR(10),
```

```
FOREIGN KEY(MER_ID) REFERENCES Merchant(MER_ID),  
FOREIGN KEY(PROD_TYPE_CODE) REFERENCES Product_Type(PROD_TYPE_CODE)  
);
```

```
CREATE TABLE "Account_Type"(  
    ACC_TYPE_ID VARCHAR(10) PRIMARY KEY,  
    ACC_TYPE_DETAILS VARCHAR(10)  
);
```

```
CREATE TABLE "Account"(  
    ACC_ID VARCHAR(10) PRIMARY KEY,  
    ACC_NO VARCHAR(5),  
    ACC_NAME VARCHAR(20),  
    ACC_LAST_OPEN VARCHAR(30),  
    ACC_BALANCE INT,  
    ACC_TYPE_ID VARCHAR(10),  
    USER_ID VARCHAR(10),  
    FOREIGN KEY(ACC_TYPE_ID) REFERENCES Account_Type(ACC_TYPE_ID),  
    FOREIGN KEY(USER_ID) REFERENCES "User"(USER_ID)  
);
```

```
CREATE TABLE "Transaction" (  
    TRANS_ID VARCHAR(10) PRIMARY KEY,  
    TRANS_AMOUNT INT,  
    TRANS_DATE VARCHAR(10),  
    TRANS_ADDRESS VARCHAR(50),  
    TRANS_QUANTITY VARCHAR(10),  
    ACC_ID VARCHAR(10),  
    PROD_ID VARCHAR(10),
```

```
USER_ID VARCHAR(10),  
FOREIGN KEY(ACC_ID) REFERENCES Account(ACC_ID),  
FOREIGN KEY(PROD_ID) REFERENCES Product(PROD_ID),  
FOREIGN KEY(USER_ID) REFERENCES "User"(USER_ID)  
);
```

```
INSERT INTO "User"
```

```
(USER_ID, USER_NAME, USER_ADDRESS, USER_EMAIL, USER_PHONE_NUMBER, USER_LOGIN,  
USER_PASSWORD)
```

```
VALUES
```

```
('1010021', 'John Proctor', '3066 Glover Road BC Coquitlam', 'jproctor123@gmail.com', '(604)-939-  
0363', 'Johnp1235', 'thecrucible32' ),
```

```
('1101123', 'Lucas Timothy', '3713 Sixth Street BC New Westminster',  
'lukat543@gmail.com', '(604)-787-7160', 'lukatim', 'lookathim12'),
```

```
('1054254', 'Santa Claus', '15 Tanner Street BC Vancouver', 'sclaus156@gmail.com', '(604)-454-8445',  
'mrclaus156', 'happychristmas22'),
```

```
('1043501', 'Percy Jackson', '3737 Sixth Street BC New Westminster', 'pjackson6631@gmail.com',  
'(778)-773-3566', 'waterboy63', 'lightningthief12'),
```

```
('1120501', 'Arthur Pendragon', '3312 Blanshard BC Victoria', 'apendrag176@gmail.com', '(250)-414-  
8583', 'artpen123', 'excalibruh12');
```

```
INSERT INTO Merchant
```

```
(MER_ID, MER_NAME, MER_ADDRESS, MER_EMAIL, MER_PHONE_NUMBER)
```

```
VALUES
```

```
('1200101', 'Sebastian Fors', '4901 Robson St BC Vancouver', 'forsen135@gmail.com', '(604)-648-  
3686'),
```

```
('1014201', 'Jeff Bezos', '3463 Scotts Lane', 'bezoj675@gmail.com', '(250)-722-7127'),
```

```
('1501235', 'Kevin Turtle', '1784 Hastings Street BC Vancouver', 'kturt461@gmail.com', '(604)-710-  
4656'),
```

```
('1016010', 'Steven Armstrong', '1949 Wellington Ave BC Chilliwack', 'sarmstrong12@gmail.com',  
'(604)-793-2246'),
```

```
('1510123', 'Margaret Thatcher', '4087 Tchesinkut Lake Rd BC Hansard', 'mthatcher46@gmail.com',  
'(250)-966-3530');
```

```
INSERT INTO Product_Type
```

```
(PROD_TYPE_CODE, PROD_TYPE_DETAILS)
```

```
VALUES
```

```
('5610123', 'Charity'),
```

```
('5742014', 'Subscription'),
```

```
('5436610', 'Item'),
```

```
('5802515', 'Service'),
```

```
('5704021', 'Warranty');
```

```
INSERT INTO Product
```

```
(PROD_ID, PROD_DETAILS, MER_ID, PROD_TYPE_CODE)
```

```
VALUES
```

```
('3410000', 'Safe to ship item', '1014201', '5436610'),
```

```
('3640160', 'Work will be done soon', '1501235', '5802515'),
```

```
('3809910', 'Reoccurring subscription', '1200101', '5742014'),
```

```
('3102501', 'Pledge donation', '1016010', '5610123'),
```

```
('3506041', 'Order for milk and cookies', '1014201', '5436610');
```

```
INSERT INTO Account_Type
```

```
(ACC_TYPE_ID, ACC_TYPE_DETAILS)
```

```
VALUES
```

```
('6700140', 'Savings'),
```

```
('6135000', 'Chequing'),
```

```
('6780100', 'Investments'),
```

```
('6890104', 'Marketing'),
```

```
('6230100', 'Deposit');
```

INSERT INTO Account

(ACC_ID, ACC_NO, ACC_NAME, ACC_LAST_OPEN, ACC_BALANCE, ACC_TYPE_ID, USER_ID)

VALUES

('7101041', 'A0151', 'Johns Farm', '2022-10-17', '\$1230.56', '6135000', '1010021'),
('7891401', 'B0146', 'Looking Mirror', '2022-08-22', '\$666.66', '6135000', '1101123'),
('7310102', 'A1061', 'North Pole', '2021-25-12', '\$1501014.11', '6700140', '1054254'),
('7610510', 'C0651', 'Underwater', '2022-07-15', '\$5600.10', '6135000', '1043501'),
('7090150', 'B1010', 'Garden of Avalon', '2022-06-05', '\$150.00', '6700140', '1120501');

INSERT INTO TRANSACTION

(TRANS_ID, TRANS_AMOUNT, TRANS_DATE, TRANS_ADDRESS, TRANS_QUANTITY, ACC_ID, PROD_ID, USER_ID)

VALUES

('8010140', '\$160.00', '2021-06-29', '845 Burrard St BC Vancouver', '2', '7101041', '3410000', '1010021'),
('8910010', '\$80.00', '2022-07-30', '5020 Nootka Street BC Vancouver', '1', '7891401', '3809910', '1101123'),
('8710512', '\$10.00', '2021-12-24', '4155 St George Street BC Vancouver', '12', '7310102', '3506041', '1054254'),
('8201081', '\$320.00', '2022-05-26', '4297 Royal Avenue BC New Westminster', '1', '7610510', '3640160', '1043501'),
('8401410', '\$0.01', '2022-08-28', '231 Robson St BC Vancouver', '1', '7090150', '3102501', '1120501');