**Normalized Database:**

CREATE TABLE Stores (

store\_id INT NOT NULL,

phone\_number INT NOT NULL,

employee\_count INT NOT NULL,

address\_street\_number INT NOT NULL,

address\_street VARCHAR2(100) NOT NULL,

address\_city VARCHAR2(100) NOT NULL,

address\_province VARCHAR2(100) NOT NULL,

address\_postal\_code VARCHAR2(6) NOT NULL,

PRIMARY KEY (store\_id)

);

CREATE TABLE Product(

product\_id INT NOT NULL,

product\_name VARCHAR2(100) NOT NULL,

clothing\_type VARCHAR2(100) NOT NULL,

price NUMBER(5,2) NOT NULL,

brand VARCHAR2(100) NOT NULL,

material VARCHAR2(100) NOT NULL,

product\_size CHAR NOT NULL,

colour VARCHAR2(100) NOT NULL,

product\_desc VARCHAR2(200),

PRIMARY KEY (product\_id)

);

CREATE TABLE Products\_In\_Store (

product\_id INT NOT NULL,

store\_id INT NOT NULL,

quantity INT NOT NULL,

PRIMARY KEY (product\_id, store\_id),

FOREIGN KEY (product\_id) REFERENCES Product(product\_id),

FOREIGN KEY (store\_id) REFERENCES Stores(store\_id)

);

CREATE TABLE Employee (

employee\_id INT NOT NULL,

first\_name VARCHAR2(50) NOT NULL,

middle\_name VARCHAR2(50),

last\_name VARCHAR2(50) NOT NULL,

department VARCHAR2(50) NOT NULL,

phone\_number INT NOT NULL,

email\_address VARCHAR2(50) NOT NULL,

employee\_role VARCHAR2(50) NOT NULL,

salary FLOAT NOT NULL,

bank\_account\_number NUMBER NOT NULL,

birth\_date DATE NOT NULL,

date\_hired DATE NOT NULL,

PRIMARY KEY (employee\_id)

);

CREATE TABLE Employees\_In\_Store(

employee\_id INT NOT NULL,

store\_id INT NOT NULL,

PRIMARY KEY (employee\_id),

FOREIGN KEY (employee\_id) REFERENCES Employee(employee\_id),

FOREIGN KEY (store\_id) REFERENCES Stores(store\_id)

);

CREATE TABLE Address\_Of\_Employee(

addressEmp\_id INT NOT NULL,

address\_street\_number INT NOT NULL,

address\_street VARCHAR2(100) NOT NULL,

address\_city VARCHAR2(100) NOT NULL,

address\_province VARCHAR2(100) NOT NULL,

address\_postal\_code VARCHAR2(6) NOT NULL,

PRIMARY KEY (addressEmp\_id)

);

CREATE TABLE Employee\_Address\_Ids(

addressEmp\_id INT NOT NULL,

employee\_id INT NOT NULL,

PRIMARY KEY (addressEmp\_id),

FOREIGN KEY (employee\_id) REFERENCES Employee(employee\_id),

FOREIGN KEY (addressEmp\_id) REFERENCES Address\_Of\_Employee(addressEmp\_id)

);

CREATE TABLE Customer\_Loyalty\_Card(

customer\_id INT NOT NULL,

first\_name VARCHAR2(50) NOT NULL,

middle\_name VARCHAR2(50),

last\_name VARCHAR2(50) NOT NULL,

phone\_number INT NOT NULL,

email\_address VARCHAR2(100) NOT NULL,

birth\_date DATE NOT NULL,

gender VARCHAR(10),

account\_points SMALLINT DEFAULT 0,

date\_acquired DATE NOT NULL,

last\_redeemed DATE,

PRIMARY KEY(customer\_id)

);

CREATE TABLE Address\_Of\_Customer(

addressCustomer\_id INT NOT NULL,

address\_street\_number INT NOT NULL,

address\_street VARCHAR2(100) NOT NULL,

address\_city VARCHAR2(100) NOT NULL,

address\_province VARCHAR2(100) NOT NULL,

address\_postal\_code VARCHAR2(6) NOT NULL,

PRIMARY KEY (addressCustomer\_id)

);

CREATE TABLE Customer\_Address\_Ids(

customer\_id INT NOT NULL,

addressCustomer\_id INT NOT NULL,

PRIMARY KEY (addressCustomer\_id),

FOREIGN KEY (customer\_id) REFERENCES Customer\_Loyalty\_Card(customer\_id),

FOREIGN KEY (addressCustomer\_id) REFERENCES Address\_Of\_Customer(addressCustomer\_id)

);

CREATE TABLE Orders(

receipt\_number INT NOT NULL,

total\_amount NUMBER(10,2) NOT NULL,

promotions VARCHAR2(100),

cash\_payment CHAR NOT NULL,

card\_payment CHAR NOT NULL,

order\_time TIMESTAMP NOT NULL,

PRIMARY KEY (receipt\_number)

);

CREATE TABLE Orders\_In\_Store(

receipt\_number INT NOT NULL,

store\_id INT NOT NULL,

PRIMARY KEY (receipt\_number),

FOREIGN KEY (receipt\_number) REFERENCES Orders(receipt\_number),

FOREIGN KEY (store\_id) REFERENCES Stores(store\_id)

);

CREATE TABLE Customer\_Order(

receipt\_number INT NOT NULL,

customer\_id INT NOT NULL,

PRIMARY KEY (receipt\_number),

FOREIGN KEY (receipt\_number) REFERENCES Orders(receipt\_number),

FOREIGN KEY (customer\_id) REFERENCES Customer\_Loyalty\_Card(customer\_id)

);

CREATE TABLE Product\_Order(

product\_id INT NOT NULL,

receipt\_number INT NOT NULL,

item\_amount INT DEFAULT 0,

PRIMARY KEY (product\_id, receipt\_number),

FOREIGN KEY (product\_id) REFERENCES Product(product\_id),

FOREIGN KEY (receipt\_number) REFERENCES Orders(receipt\_number)

);

CREATE TABLE Card\_Payment(

card\_number NUMBER(16,0) NOT NULL,

payment\_network VARCHAR2(20) NOT NULL,

card\_type CHAR NOT NULL,

cvv\_number NUMBER(3,0) NOT NULL,

expiry\_date DATE NOT NULL,

PRIMARY KEY (card\_number)

);

CREATE TABLE Card\_Payment\_Order(

receipt\_number INT NOT NULL,

card\_number NUMBER(16,0) NOT NULL,

PRIMARY KEY (receipt\_number),

FOREIGN KEY (receipt\_number) REFERENCES Orders(receipt\_number),

FOREIGN KEY (card\_number) REFERENCES Card\_Payment(card\_number)

);

CREATE TABLE Debit\_Card(

card\_number NUMBER(16,0) NOT NULL,

chequing\_account\_number NUMBER(11,0) NOT NULL,

bank\_name VARCHAR2(50) NOT NULL,

PRIMARY KEY (card\_number, chequing\_account\_number),

FOREIGN KEY (card\_number) REFERENCES Card\_Payment (card\_number)

);

CREATE TABLE Credit\_Card(

card\_number NUMBER(16,0) NOT NULL,

creditor\_number NUMBER(20,0) NOT NULL,

creditor\_name VARCHAR2(50) NOT NULL,

PRIMARY KEY (card\_number, creditor\_number),

FOREIGN KEY (card\_number) REFERENCES Card\_Payment(card\_number)

);