CREATE TABLE USERS(

UID INT IDENTITY(1,1),

UName varchar(255),

PRIMARY KEY (UID),

);

CREATE TABLE PRODUCTS (

PName varchar(255),

Maker varchar(255),

Category varchar(255),

PRIMARY KEY (PName)

);

CREATE TABLE SHOPS(

SName varchar(255),

PRIMARY KEY (SName),

);

CREATE TABLE EMPLOYEE(

EmployeeID INT IDENTITY(1,1),

EName varchar(255),

Salary double PRECISION,

PRIMARY KEY (EmployeeID),

);

CREATE TABLE ORDERS(

OID INT IDENTITY(1,1),

UID INT,

ODate\_time DATE,

Shipping\_address varchar(255),

PRIMARY KEY (OID),

FOREIGN KEY (UID) REFERENCES USERS(UID)

ON UPDATE CASCADE

);

CREATE TABLE COMPLAINTS(

CID INT IDENTITY(1,1),

UID INT,

CText varchar(255),

CStatus varchar(15) NOT NULL CHECK (CStatus IN ('pending', 'being handled', 'addressed')),

Filed\_DATE DATE,

PRIMARY KEY (CID),

FOREIGN KEY (UID) REFERENCES Users(UID)

ON UPDATE CASCADE

);

CREATE TABLE PRICE\_HISTORY (

PName varchar(255),

SName varchar(255),

StartDate DATE,

EndDate DATE,

Price DOUBLE PRECISION,

PRIMARY KEY (PName, SName, StartDate, EndDate),

-- PNam and SName is foreign key

FOREIGN KEY (PName) REFERENCES PRODUCTS(PName)

ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName)

ON UPDATE CASCADE

);

CREATE TABLE PRODUCTS\_IN\_ORDERS(

PName varchar(255),

SName varchar(255),

OID INT,

OPID INT,

OPrice DOUBLE PRECISION,

OQuantity INT,

Delivery\_date DATE,

OStatus varchar(10) NOT NULL CHECK (OStatus IN (‘Shipped’, 'Delivered', ’Returned’)),

PRIMARY KEY (PName, SName, OID),

-- PNam and SName is foreign key

FOREIGN KEY (PName) REFERENCES PRODUCTS(PName)

ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName)

ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES ORDERS(OID)

ON UPDATE CASCADE

);

CREATE TABLE PRODUCTS\_IN\_SHOPS\_R2(

PName varchar(255),

SName varchar(255),

SPID varchar(255),

CONSTRAINT USPID UNIQUE (SPID),

PRIMARY KEY (PName, SName),

-- PName and SName is foreign key

FOREIGN KEY (PName) REFERENCES PRODUCTS(PName)

ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName)

ON UPDATE CASCADE

);

CREATE TABLE PRODUCTS\_IN\_SHOPS\_R1(

SPID varchar(255),

SPrice DOUBLE PRECISION,

SQuantity INT,

PRIMARY KEY (SPID),

FOREIGN KEY (SPID) REFERENCES PRODUCTS\_IN\_SHOPS\_R2(SPID)

ON UPDATE CASCADE,

);

CREATE TABLE COMPLAINTS\_ON\_SHOPS(

CID INT,

SName varchar(255),

PRIMARY KEY (CID),

FOREIGN KEY (CID) REFERENCES COMPLAINTS(CID),

--ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName),

--ON UPDATE CASCADE

);

CREATE TABLE COMPLAINTS\_ON\_ORDERS(

CID INT,

OID INT,

PRIMARY KEY (CID),

FOREIGN KEY (CID) REFERENCES COMPLAINTS(CID),

--ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES ORDERS(OID),

-- ON UPDATE CASCADE

-- ON DELETE SET NULL

);

CREATE TABLE FEEDBACK\_R2(

UID INT,

OID INT,

PRIMARY KEY (OID),

FOREIGN KEY (UID) REFERENCES USERS(UID),

--ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES ORDERS(OID),

--ON UPDATE CASCADE

);

CREATE TABLE FEEDBACK\_R1(

PName varchar(255),

SName varchar(255),

OID INT,

FDate\_time DATE,

Rating INT NOT NULL CHECK (Rating IN (1,2,3,4,5)),

-- alternative

-- Rating INT CHECK (Rating > 0 AND Rating < 6)

Comment varchar(255),

PRIMARY KEY (PName,SName,OID),

FOREIGN KEY (PName) REFERENCES PRODUCTS(PName),

--ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName),

--ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES FEEDBACK\_R2(OID),

--ON UPDATE CASCADE

);

CREATE TABLE HANDLED(

CID INT,

handled\_DATE DATE,

EmployeeID INT,

PRIMARY KEY (CID),

FOREIGN KEY (CID) REFERENCES COMPLAINTS(CID),

--ON UPDATE CASCADE,

FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEE(EmployeeID),

--ON UPDATE CASCADE

);

DRAFT

CREATE TABLE FEEDBACK\_R2(

UID INT,

OID INT,

PRIMARY KEY (OID),

FOREIGN KEY (UID) REFERENCES ORDERS(UID)

ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES ORDERS(OID)

ON UPDATE CASCADE

);

CREATE TABLE FEEDBACK\_R1(

PName varchar(255),

SName varchar(255),

OID INT,

FDate\_time DATE,

Rating INT NOT NULL CHECK (Rating IN (1,2,3,4,5)),

Comment varchar(255),

PRIMARY KEY (PName,SName,OID),

FOREIGN KEY (PName) REFERENCES PRODUCTS(PName)

ON UPDATE CASCADE,

FOREIGN KEY (SName) REFERENCES SHOPS(SName)

ON UPDATE CASCADE,

FOREIGN KEY (OID) REFERENCES FEEDBACK\_R2(OID)

ON UPDATE CASCADE

);