--creating items table

CREATE TABLE items (

item\_num INTEGER NOT NULL,

description VARCHAR2(255) NOT NULL,

item\_type VARCHAR2(255) NOT NULL,

PRIMARY KEY(item\_num)

);

--creating vendors table

CREATE TABLE vendors (

vendor\_id INTEGER NOT NULL,

vendor VARCHAR2(255) NOT NULL,

PRIMARY KEY(vendor\_id)

);

--creating locations table

CREATE TABLE locations (

location\_id INTEGER NOT NULL,

location VARCHAR2(255) NOT NULL,

PRIMARY KEY(location\_id)

);

--creating units table

CREATE TABLE units (

unit\_id INTEGER NOT NULL,

unit VARCHAR2(255) NOT NULL,

PRIMARY KEY(unit\_id)

);

--creating purchase table

CREATE TABLE purchase (

purchase\_id INTEGER NOT NULL,

quantity\_on\_hand INTEGER NOT NULL,

cost FLOAT(126) NULL,

purchase\_date DATE NULL,

item\_num INTEGER NULL,

vendor\_id INTEGER NULL,

PRIMARY KEY (purchase\_id),

CONSTRAINT purchase\_item\_fk FOREIGN KEY (item\_num) REFERENCES items (item\_num),

CONSTRAINT purchase\_vendor\_fk FOREIGN KEY (vendor\_id) REFERENCES vendors (vendor\_id)

);

--creating transactions table

CREATE TABLE transactions (

transaction\_id INTEGER NOT NULL,

quantity INTEGER NOT NULL,

item\_num INTEGER NULL,

location\_id INTEGER NULL,

unit\_id INTEGER NULL,

primary key(transaction\_id)

);

ALTER TABLE transactions ADD FOREIGN KEY (item\_num) REFERENCES items (item\_num);

ALTER TABLE transactions ADD FOREIGN KEY (location\_id) REFERENCES locations (location\_id);

ALTER TABLE transactions ADD FOREIGN KEY (unit\_id) REFERENCES units (unit\_id);

--creating sales table

CREATE TABLE sales (

sale\_id INTEGER NOT NULL,

price FLOAT(126) NULL,

date\_sold DATE NULL,

cust\_id INTEGER NULL,

purchase\_id INTEGER NULL,

transaction\_id INTEGER NULL,

primary key(sale\_id)

);

ALTER TABLE sales ADD FOREIGN KEY (purchase\_id) REFERENCES purchase (purchase\_id);

ALTER TABLE sales ADD FOREIGN KEY (transaction\_id) REFERENCES transactions (transaction\_id);

--Inserting values in items table

INSERT INTO items (item\_num, description, item\_type)

VALUES (1000, 'Bennet Farm free-range eggs', 'Dairy');

INSERT INTO items (item\_num, description, item\_type)

VALUES (2000, 'Ruby''s Kale', 'Produce');

INSERT INTO items (item\_num, description, item\_type)

VALUES (1100, 'Freshness White beans', 'Canned');

INSERT INTO items (item\_num, description, item\_type)

VALUES (1222, 'Freshness Green beans', 'Canned');

INSERT INTO items (item\_num, description, item\_type)

VALUES (1223, 'Freshness Green beans', 'Canned');

INSERT INTO items (item\_num, description, item\_type)

VALUES (1224, 'Freshness Wax beans', 'Canned');

INSERT INTO items (item\_num, description, item\_type)

VALUES (2001, 'Ruby''s Organic Kale', 'Produce');

--Inserting values in vendors table

INSERT INTO vendors (vendor\_id, vendor)

VALUES (1, 'Bennet Farms, Rt. 17 Evansville, IL 55446');

INSERT INTO vendors (vendor\_id, vendor)

VALUES (2, 'Freshness, Inc., 202 E. Maple St., St. Joseph, MO 45678');

INSERT INTO vendors (vendor\_id, vendor)

VALUES (3, 'Ruby Redd Produce, LLC, 1212 Milam St., Kenosha, AL, 34567');

--Inserting values in locations table

INSERT INTO locations (location\_id, location)

VALUES (1, 'D12');

INSERT INTO locations (location\_id, location)

VALUES (2, 'p12');

INSERT INTO locations (location\_id, location)

VALUES (3, 'a2');

INSERT INTO locations (location\_id, location)

VALUES (4, 'a3');

INSERT INTO locations (location\_id, location)

VALUES (5, 'a7');

INSERT INTO locations (location\_id, location)

VALUES (6, 'po2');

--Inserting values in units table

INSERT INTO units (unit\_id, unit)

VALUES (1, 'dozen');

INSERT INTO units (unit\_id, unit)

VALUES (2, 'bunch');

INSERT INTO units (unit\_id, unit)

VALUES (3, '12 ounce can');

INSERT INTO units (unit\_id, unit)

VALUES (4, '12 oz can');

INSERT INTO units (unit\_id, unit)

VALUES (5, '12-oz can');

INSERT INTO units (unit\_id, unit)

VALUES (6, '36 oz can');

--Inserting values in purchase table

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (1, 1000, 29, 2.35, TO\_DATE('2/1/2022', 'MM/DD/YYYY'), 1);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (2, 1000, 27, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (3, 2000, 3, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (4, 1100, 13, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (5, 1100, 53, 0.69, TO\_DATE('2/2/2022', 'MM/DD/YYYY'), 2);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (6, 1000, 25, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (7, 1100, 45, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (8, 1222, 59, 0.59, TO\_DATE('2/10/2022', 'MM/DD/YYYY'), 2);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (9, 1223, 12, 1.75, TO\_DATE('2/10/2022', 'MM/DD/YYYY'), 2);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (10, 1224, 31, 0.65, TO\_DATE('2/10/2022', 'MM/DD/YYYY'), 2);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (11, 1000, 21, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (12, 1100, 41, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (13, 1222, 47, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (14, 1224, 23, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (15, 2000, 28, 1.29, TO\_DATE('2/12/2022', 'MM/DD/YYYY'), 3);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (16, 2001, 20, 2.19, TO\_DATE('2/12/2022', 'MM/DD/YYYY'), 3);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (17, 1223, 7, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (18, 2001, 19, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (19, 2001, 7, null, null, null);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (20, 1223, 17, 1.8, TO\_DATE('2/15/2022', 'MM/DD/YYYY'), 1);

INSERT INTO purchase (purchase\_id, item\_num, quantity\_on\_hand, cost, purchase\_date, vendor\_id)

VALUES (21, 2000, 26, null, null, null);

--Inserting values in transactions table

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (1, 25, 1000, 1, 1);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (2, 2, 1000, 1, 1);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (3, 2, 2000, 2, 2);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (4, 2, 1100, 3, 3);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (5, 40, 1100, 3, 4);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (6, 2, 1000, 1, 1);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (7, 8, 1100, 3, 5);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (8, 40, 1222, 4, 3);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (9, 10, 1223, 5, 6);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (10, 30, 1224, 4, 3);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (11, 4, 1000, 1, 1);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (12, 4, 1100, 3, 3);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (13, 12, 1222, 4, 5);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (14, 8, 1224, 4, 5);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (15, 25, 2000, 2, 2);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (16, 20, 2001, 6, 2);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (17, 5, 1223, 5, 6);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (18, 1, 2001, 6, 2);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (19, 12, 2001, 6, 2);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (20, 10, 1223, 5, 6);

INSERT INTO transactions (transaction\_id, quantity, item\_num, location\_id, unit\_id)

VALUES (21, 2, 2000, 2, 2);

--Inserting values in sales table

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (1, null, null, null, 1, 1);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (2, 5.49, TO\_DATE('2/2/2022', 'MM/DD/YYYY'), 198765, 2, 2);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (3, 3.99, TO\_DATE('2/2/2022', 'MM/DD/YYYY'), null, 3, 3);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (4, 1.49, TO\_DATE('2/2/2022', 'MM/DD/YYYY'), 202900, 4, 4);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (5, null, null, null, 5, 5);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (6, 5.99, TO\_DATE('2/4/2022', 'MM/DD/YYYY'), 196777, 6, 6);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (7, 1.49, TO\_DATE('2/7/2022', 'MM/DD/YYYY'), 198765, 7, 7);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (8, null, null, null, 8, 8);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (9, null, null, null, 9, 9);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (10, null, null, null, 10, 10);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (11, 5.49, TO\_DATE('2/11/2022', 'MM/DD/YYYY'), 277177, 11, 11);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (12, 1.49, TO\_DATE('2/11/2022', 'MM/DD/YYYY'), null, 12, 12);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (13, 1.29, TO\_DATE('2/12/2022', 'MM/DD/YYYY'), 111000, 13, 13);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (14, 1.55, TO\_DATE('2/12/2022', 'MM/DD/YYYY'), null, 14, 14);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (15, null, null, null, 15, 15);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (16, null, null, null, 16, 16);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (17, 3.49, TO\_DATE('2/13/2022', 'MM/DD/YYYY'), 198765, 17, 17);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (18, 6.99, TO\_DATE('2/13/2022', 'MM/DD/YYYY'), 100988, 18, 18);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (19, 6.99, TO\_DATE('2/14/2022', 'MM/DD/YYYY'), 202900, 19, 19);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (20, null, null, null, 20, 20);

INSERT INTO sales (sale\_id, price, date\_sold, cust\_id, purchase\_id, transaction\_id)

VALUES (21, 3.99, TO\_DATE('2/15/2022', 'MM/DD/YYYY'), 111000, 21, 21);

--viewing table's data

select \* from items;

select \* from purchase;

Select \* from vendors;

Select \* from Sales;

Select \* from Transactions;

select \* from locations;

Select \* from units;

--final query

Select

A.item\_num,

A.Description,

B.quantity\_on\_hand,

B.cost,

B.purchase\_date,

C.vendor,

D.price,

D.date\_sold,

D.cust\_id as cust,

E.quantity,

A.item\_type,

F.location,

G.unit

from Items A

LEFT JOIN Purchase B ON A.item\_num=B.item\_num

LEFT JOIN Vendors C ON B.vendor\_id=C.vendor\_id

LEFT JOIN Sales D ON B.purchase\_id=D.purchase\_id

LEFT JOIN Transactions E ON D.transaction\_id=E.transaction\_id and A.item\_num=E.item\_num

LEFT JOIN Locations F ON E.location\_id=F.location\_id

LEFT JOIN Units G ON E.unit\_id=G.unit\_id;