**Problem Set 6: Data Warehousing and Standardization**

**Deliverable 1: Submit the CREATE TABLE statements for your produce table.**

CREATE TABLE produce (

produce\_name VARCHAR NOT NULL,

produce\_type VARCHAR NOT NULL,

form INT,

type VARCHAR,

legume BOOLEAN,

cup\_equivalent\_size DECIMAL(10, 2),

cup\_equivalent\_price DECIMAL(10, 2),

cup\_equivalent\_unit INT,

retail\_price\_per\_kilo DECIMAL(10, 2),

retail\_price\_unit INT,

FOREIGN KEY (retail\_price\_unit) REFERENCES price\_unit\_lookup(code),

FOREIGN KEY (cup\_equivalent\_unit) REFERENCES cup\_unit\_lookup(code),

FOREIGN KEY (form) REFERENCES form\_lookup(code)

);

**Deliverable 2: Submit the CREATE TABLE statement(s) for your lookup table(s). SELECT \* from your lookup table(s) and submit the results as a CSV**.

CREATE TABLE price\_unit\_lookup (

code INT PRIMARY KEY,

unit VARCHAR NOT NULL

);

INSERT INTO price\_unit\_lookup (code, unit) VALUES

(1, 'per pound'),

(2, 'per pint');

CREATE TABLE cup\_unit\_lookup (

code INT PRIMARY KEY,

unit VARCHAR NOT NULL

);

INSERT INTO cup\_unit\_lookup (code, unit) VALUES

(1, 'pounds'),

(2, 'fluid ounces');

CREATE TABLE form\_lookup (

code INT PRIMARY KEY,

form VARCHAR NOT NULL

);

INSERT INTO form\_lookup (code, form) VALUES

(1, 'Canned'),

(2, 'Juice'),

(3, 'Fresh'),

(4, 'Dried'),

(5, 'Frozen');

**Deliverable 3: Submit the SQL query that populates your produce table from the fruit and vegetable source table.**

INSERT INTO produce (produce\_name, produce\_type, form, type, legume, cup\_equivalent\_size, cup\_equivalent\_price, cup\_equivalent\_unit, retail\_price\_per\_kilo, retail\_price\_unit)

SELECT

TRIM(SPLIT\_PART(f.fruit, ',', 1)) AS produce\_name,

'Fruit' AS produce\_type,

fo.code AS form,

CASE

WHEN f.fruit LIKE '%,%' THEN TRIM(SPLIT\_PART(f.fruit, ',', 2))

ELSE NULL

END AS type,

FALSE AS legume,

ROUND(f.cupequivalentsize,2) AS cup\_equivalent\_size,

ROUND(f.cupequivalentprice,2) AS cup\_equivalent\_price,

c.code AS cup\_equivalent\_unit,

CASE

WHEN f.form = 'Juice' THEN NULL

ELSE ROUND(f.retailprice \* 2.2,2)

END AS retail\_price\_per\_kilo,

p.code AS retail\_price\_unit

FROM fruit\_prices f

LEFT JOIN price\_unit\_lookup p ON f.retailpriceunit = p.unit

LEFT JOIN cup\_unit\_lookup c ON f.cupequivalentunit = c.unit

LEFT JOIN form\_lookup fo ON f.form = fo.form

UNION ALL

SELECT

TRIM(SPLIT\_PART(v.vegetable, ',', 1)) AS produce\_name,

'Vegetable' AS produce\_type,

fo.code AS form,

NULL as type,

v.legume,

ROUND(v.cupequivalentsize,2) AS cup\_equivalent\_size,

ROUND(v.cupequivalentprice,2) AS cup\_equivalent\_price,

c.code AS cup\_equivalent\_unit,

v.retailprice \* 2.2 AS retail\_price\_per\_kilo,

p.code AS retail\_price\_unit

FROM vegetable\_prices v

LEFT JOIN price\_unit\_lookup p ON v.retailpriceunit = p.unit

LEFT JOIN cup\_unit\_lookup c ON v.cupequivalentunit = c.unit

LEFT JOIN form\_lookup fo ON v.form = fo.form;