Assignment 6

1.

```
justony7=> \COPY weather(city, date, temp_lo, temp_hi, prcp) FROM '/home/UAB/justony7/copy-
to-weather.txt'
justony7=> SELECT * FROM weather;
    city    | temp_lo | temp_hi | prcp |    date
------------+---------+---------+------+------------
 birmingham |      60 |      80 | 3.55 | 2005-10-12
 tuscaloosa |      60 |      75 |   10 | 2005-10-02
(2 rows)
```

```
justony7=> INSERT INTO weather VALUES ('Enterprise', 75, 85, 5, '2012-10-30'), (
'Huntsville', 65, 75, 4, '2016-10-30');
INSERT 0 2
justony7=> SELECT * FROM weather;
    city    | temp_lo | temp_hi | prcp |    date
------------+---------+---------+------+------------
 birmingham |      58 |      78 | 3.55 | 2005-10-12
 tuscaloosa |      58 |      73 |   10 | 2005-10-02
 Enterprise |      75 |      85 |    5 | 2012-10-30
 Huntsville |      65 |      75 |    4 | 2016-10-30
(4 rows)
```

2.

```
justony7=> INSERT INTO cities VALUES ('Enterprise','(31.3, -85.6)'), ('Huntsville', '(34.7,
-86.5)'), ('birmingham', '(33.5,-86.8)'), ('tuscaloosa', '(33.2,-87.6)');
INSERT 0 4
justony7=> SELECT * FROM cities;
    name    |   location
------------+--------------
 Enterprise | (31.3,-85.6)
 Huntsville | (34.7,-86.5)
 birmingham | (33.5,-86.8)
 tuscaloosa | (33.2,-87.6)
(4 rows)
```

3.

```
justony7=> SELECT city, temp_lo, temp_hi, prcp, date, location
justony7-> FROM weather, cities
justony7-> WHERE weather.city = cities.name;
    city    | temp_lo | temp_hi | prcp |    date    |   location
------------+---------+---------+------+------------+--------------
 birmingham |      60 |      80 | 3.55 | 2005-10-12 | (33.5,-86.8)
 tuscaloosa |      60 |      75 |   10 | 2005-10-02 | (33.2,-87.6)
 Enterprise |      75 |      85 |    5 | 2012-10-30 | (31.3,-85.6)
 Huntsville |      65 |      75 |    4 | 2016-10-30 | (34.7,-86.5)
(4 rows)
```

4.

```
justony7=> UPDATE weather
SET temp_hi = temp_hi - 2, temp_lo = temp_lo - 2
WHERE date <= '2005-10-12';
UPDATE 2
justony7=> SELECT city, temp_lo, temp_hi, prcp, date, location
FROM weather, cities
WHERE weather.city = cities.name;
    city     | temp_lo | temp_hi | prcp |    date    |   location
-------------+---------+---------+------+------------+--------------
 Enterprise  |      75 |      85 |    5 | 2012-10-30 | (31.3,-85.6)
 Huntsville  |      65 |      75 |    4 | 2016-10-30 | (34.7,-86.5)
 birmingham  |      58 |      78 | 3.55 | 2005-10-12 | (33.5,-86.8)
 tuscaloosa  |      58 |      73 |   10 | 2005-10-02 | (33.2,-87.6)
(4 rows)
```

```
justony7=> DELETE FROM weather
justony7-> WHERE prcp <= 4;
DELETE 2
justony7=> SELECT * FROM weather;
    city     | temp_lo | temp_hi | prcp |    date
-------------+---------+---------+------+------------
 tuscaloosa  |      58 |      73 |   10 | 2005-10-02
 Enterprise  |      75 |      85 |    5 | 2012-10-30
(2 rows)
```

5.

```
justony7=> ALTER TABLE cities ADD COLUMN population int;
ALTER TABLE
justony7=> SELECT * FROM cities;
    name     |   location   | population
-------------+--------------+------------
 Enterprise  | (31.3,-85.6) |
 Huntsville  | (34.7,-86.5) |
 birmingham  | (33.5,-86.8) |
 tuscaloosa  | (33.2,-87.6) |
(4 rows)
```

6.

```
justony7=> ALTER TABLE cities ADD PRIMARY KEY (name);
ALTER TABLE
justony7=> ALTER TABLE weather ADD PRIMARY KEY (city, date);
ALTER TABLE
justony7=> ALTER TABLE weather ADD FOREIGN KEY (city) REFERENCES cities;
ALTER TABLE
justony7=> INSERT INTO weather VALUES ('Mobile', 77, 90, 11.5, '2013-05-24');
ERROR:  insert or update on table "weather" violates foreign key constraint "weather_city_f
key"
DETAIL:  Key (city)=(Mobile) is not present in table "cities".
```

I, Justin Anthony Timberlake, declare that I have completed this assignment completely and entirely on my own, without any consultation with others. I understand that any breach of the UAB Academic Honor Code may result in severe penalties.