Team 01-07
Team Members:
Jm Tameta, Sarah Phung, Val Roberts
ACC 311/ CSC 315
Energy Demand
SQL Data Manipulation Queries

buildings

<u>privilege user</u>

- CRUD
    - remove buildings
    - create buildings
    - update buildings
    - view buildings

<u>user</u>

- view buildings
    SELECT * FROM buildings;
- view building specific types
    SELECT DISTINCT buildings.btype FROM buildings;
- summation of square footage of all buildings
    SELECT SUM(sq_ft)
    FROM buildings;
- summation of square footage of all buildings by type
    SELECT SUM(sq_ft)
    GROUP BY(btype);
- summation of square footage of specific types of buildings
    SELECT SUM(sq_ft)
    FROM buildings
    WHERE btype = (input type);
- view buildings by year oldest to newest
    SELECT name, year_built
    FROM buildings
    ORDER BY year_built ASC;
- view buildings by year newest to oldest
    SELECT name, year_built
    FROM buildings
    ORDER BY year_built DSC;
- view buildings by A-Z* (if time)

```
SELECT name
FROM buildings
ORDER BY name ASC;
```
- view buildings by Z-A* (if time)
```
SELECT name
FROM buildings
ORDER BY name DSC;
```

el_energy / ng_energy

<u>privilege user</u>
- CRUD
    - remove buildings
    - create buildings
    - update buildings
    - view buildings

<u>user</u>
- view all data attributes with all month & year
```
select extract (month from start_date), extract (year from start_date), kWh, cost
from el_energy;
```
- view all data attributes by month
```
select extract (month from start_date), extract (year from start_date), kWh, cost
from el_energy
where extract (month from start_date) = 7;
```
- view all data attributes by year
```
select extract (month from start_date), extract (year from start_date), kWh, cost
from el_energy
where extract (year from start_date) = 2014;
```
- view average month cost - provides only the average
```
select avg(cost)
from el_energy
where extract (month from start_date) = 7;
```
- view average month units - provides only the average
```
select avg(kwh)
from el_energy
where extract (month from start_date) = 7;
```
- view sum year costs
```
select sum(cost)
from el_energy
```

where extract(year from start_date) = 8;
- view sum year units
          select sum(kwh)
          from el_energy
          where extract(year from start_date) = 2015;

- view average cost within year
          select avg(cost)
          from el_energy
          where extract(year from start_date) = 2015;
- view average units within year
          select avg (kwh)
          from el_energy
          where extract(year from start_date) = 2019