Milestone 3

**CIS 450/550**

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**To Connect to our AWS Database:**

Endpoint: cis550project.cl12qlaqfgyt.us-west-2.rds.amazonaws.com

Username: cis550krew

Password: cis450550team

\*\*\*\*\*\*\*\*\*\*\***Note**: I went to office hours today to ask the TA (Hari) about how to create a guest account to give you access to our AWS instance. It seems this must be done through IAM (Identity and Access Management). However, given my educate account, it seems I do not have the appropriate permissions to create this guest account. After working on this with the TA for a while, he said I should just send you our endpoint url, username, and password, and that would allow you to connect to our instance. Hope this is okay, let me know if not!

**Code to populate the database:**

create table Universities (

 FID number primary key,

 name varchar(150),

 address varchar(100),

 city varchar(30),

 state char(2),

 zip varchar(11)

);

create table Population (

 state char(2) primary key,

 pop\_2010 number,

 pop\_2011 number,

 pop\_2012 number,

 pop\_2013 number,

 pop\_2014 number,

 pop\_2015 number,

 pop\_2016 number

);

create table Obesity (

 state char(2) primary key,

 obesity\_rate number

);

create table sport\_venues (

 FID number primary key,

 name varchar(150),

 address varchar(100),

 city varchar(30),

 state char(2),

 zip varchar(7)

);

**SQL Queries**:

* For each cities/towns which contain multiple sports venues (count) (join by city name or by zipcode)

Select c.city, c.population, count(\*) as numberOfSportsVenues

From MajorSportsVenues s, CitiesAndTowns c

Where s.city = c.name

Group by c.name, c.population

* For each cities/towns which contain multiple hospitals (count) with state population  (join by city name or by zipcode)

Select c.name, c.population, count(\*) as numberOfHospitals

From Hospitals s, CitiesAndTowns c

Where s.city = c.name

Group by c.name,  c.population

* Number of cities in each state

Select state, count(\*) as NumberOfCities

From CitiesAndTowns

Group by state

* Population for state x

Select \*

From statePopulation s

Where s.state = ‘x’

* For each state, return the names of colleges  that are in cities that contain the maximum number of sport venues

From

Select MajorSportsVenues s, Colleges c

Where s.city = h.city and h.city = c.city and s.city IN

(with test as (select sv.city , count (\*) as count

from MajorSportsVenues sv

Group by sv.city

)

Selest t.city

From test t

Where

Order by t.count

Limit 1)

* Select obesity from state = x

Select \*

From Obesity o

Where o.state = ‘x’

* Number of colleges in every state

Select state, count(\*) as numberOfColleges

From Colleges c

Group by c.state

* Number of colleges in every city

Select state, count(\*) as numberOfColleges

From Colleges c

Group by c.city

* Number of colleges in every state

Select state, count(\*) as numberOfHospitals

From Hospitals h

Group by h.state

* Number of colleges in every city

Select state, count(\*) as numberOfHospitals

From Hospitals h

Group by h.city

**Updated Relational Schema:**

SPORT\_VENUES(FID, name, address, city, state, zipcode)

Hospitals(hospitalID, name, address, city, state, zipcode) - Hasn’t been populated yet

CITY(FID, name, pop, state)

UNIVERSITIES(FID, name, city, state, zipcode)

POPULATION(state, pop\_2010, pop\_2011, pop\_2012, pop\_2013, pop\_2014, pop\_2015, pop\_2016)

OBESITY(state, obesity\_rate)