

Queries for creating tables and populating tables. Also, a link to the raw data for each table is included.

-----create table for district entity

```
create table district(
zipcode char(5) not null,
MalePop mediumint unsigned not null,
FemalePop mediumint unsigned not null,
AverageHouseValue varchar(20),
IncomePerHousehold varchar(20),
MedianAge decimal(4,2) not null,
AverageFamilySize decimal(3,2) not null,
AreaLand decimal(7,6) not null,
AreaWater decimal(7,6) not null,
under_5 varchar(10),
5_9 varchar(10),
10_14 varchar(10),
15_19 varchar(10),
20_24 varchar(10),
25_29 varchar(10),
30_34 varchar(10),
35_39 varchar(10),
40_44 varchar(10),
45_49 varchar(10),
50_54 varchar(10),
55_59 varchar(10),
60_64 varchar(10),
65_69 varchar(10),
70_74 varchar(10),
75_79 varchar(10),
80_84 varchar(10),
85_over varchar(10),
16_over varchar(10),
18_over varchar(10),
21_over varchar(10),
62_over varchar(10),
65_over varchar(10),
primary key(zipcode)
) engine = innodb default character set = utf8 collate= utf8_general_ci;
```

-----populate table district

```
LOAD DATA LOCAL INFILE '/home/CSE530/public_html/data/district.txt' INTO TABLE district;
```

-----link to raw data

<http://52.33.71.235/~CSE530/data/district.txt>

-----create table for race entity

```
create table race(  
  raceName varchar(20) not null,  
  wikiLink varchar(200) not null,  
  primary key(raceName)  
)engine = innodb default character set = utf8 collate= utf8_general_ci;
```

-----populate table race

```
LOAD DATA LOCAL INFILE '/home//home/CSE530/public_html/data/race.txt' INTO TABLE  
race;
```

-----link to the raw data

<http://52.33.71.235/~CSE530/data/race.txt>

----- create table for district_has_race entity

```
create table districtHasRace(  
  Zipcode char(5) not null,  
  raceName varchar(20) not null,  
  population mediumint unsigned not null,  
  foreign key (Zipcode) references district (zipcode),  
  foreign key (raceName) references race (raceName)  
) engine = innodb default character set = utf8 collate= utf8_general_ci;
```

-----populate table districtHasRace

```
LOAD DATA LOCAL INFILE '/home/CSE530/public_html/data/district_has_race.txt' INTO  
TABLE districtHasRace;
```

-----link to the raw data

http://52.33.71.235/~CSE530/data/district_has_race.txt

-----create table restaurant

```
create table restaurant(  
  yelpID varchar(100) not null,  
  name varchar(100) not null,  
  address varchar(200) not null,  
  longitude float not null,  
  latitude float not null,  
  zipcode char(5) not null,  
  rating decimal(2,1) not null,  
  url varchar(255) not null,  
  style varchar(50) not null,  
  primary key(yelpID),
```

foreign key (zipcode) references district(zipcode)
)engine = innodb default character set = utf8 collate= utf8_general_ci;

-----populate table restaurant

LOAD DATA LOCAL INFILE '/home/CSE530/public_html/data/restaurant.txt' INTO TABLE
restaurant;

-----link to the raw data

<http://52.33.71.235/~CSE530/data/restaurant.txt>

-----create table offenders

```
create table offender (  
id int not null,  
Name varchar(30) not null,  
address varchar(50),  
city varchar(30),  
st varchar(10),  
zipcode char(5) not null,  
offense varchar(100),  
offense_city varchar(30),  
offense_state varchar(10),  
victim_gender varchar(10),  
victime_age int(4),  
DOB date,  
offense_date date,  
age_at_offender int(3),  
primary key (id),  
foreign key (zipcode) references district(zipcode)  
) engine = innodb default character set = utf8 collate= utf8_general_ci;
```

-----populate data

LOAD DATA LOCAL INFILE '/home/CSE530/public_html/data/STL_Offenders.txt' INTO TABLE
offender;

-----link to the raw data

<http://52.33.71.235/~CSE530/data/offender.txt>

----- create table House

```
CREATE TABLE HOUSE(  
zillow_id VARCHAR(15) NOT NULL,
```

```

        zipcode char(5),
        size int,
        address VARCHAR(15),
        city VARCHAR(20),
        bathrooms int,
        bedrooms int,
        state VARCHAR(5),
        value int,
        zest_value int,
        Zillow_link VARCHAR(100),
        PRIMARY key(zillow_id)
    ) engine = INNODB DEFAULT character SET = utf8 COLLATE = utf8_general_ci;
-----populate data
LOAD DATA INFILE '/home/CSE530/data/house.txt' into table HOUSE fields terminated by ',' lines
terminated by '\n'
(zillow_id,address,city,state,zipcode,bedrooms,bathrooms,size,zest_value,value,zillow_link);

-----link to the raw data
http://52.33.71.235/~CSE530/data/house.txt

```

----- create table school

```

Create table schools(
    id int,
    name varchar(200),
    address varchar(200),
    zip char(5),
    rating int,
    type varchar(200),
    latitude double,
    longitude double,
    primary key (id),
    Foreign key (zip) references district(zipcode)
)engine = innodb default character set = utf8 collate= utf8_general_ci;

```

-----Explanation:

This is only a part of code. We used PHP to get the data from website of "Great Schools", which listed all the schools in st.louis. For each school, we found its details like name, address and

then saved each of them in the array like \$match0[], \$match3[]....After saving the data into array, we use php statement which include the SQL statement "insert into school (id, name, street, zip, rating, type, latitude, longitude) values (?, ?, ?, ?, ?, ?, ?, ?)" to insert every school's information into the table named school.

-----Part of PHP code:

```
$mysqli = new mysqli('localhost', 'root', 'cse530', 'cse530')
if($mysqli->connect_errno) {
    printf("Connection Failed: %s\n", $mysqli->connect_error);
    exit;
}
$stmt = $mysqli->prepare("insert into schools (id, name, address, zip, rating, type, latitude, longitude) values (?, ?, ?, ?, ?, ?, ?, ?)");
if(!$stmt){
    printf("Query Prep Failed: %s\n", $mysqli->error);
    exit;
}
$stmt->bind_param('isssisdd', $matches00[1][$i],
$matches0[1][$i], $matches1[1][$i], $matches2[1][$i], $matches3[1][$i], $matches4[1][$i], $matches5[1][$i], $matches6[1][$i]);
$stmt->execute();
```

-----link to the raw data

<http://52.33.71.235/~CSE530/data/Schools.txt>