Name: Reha Patel **BUID:** U17557726

CAS 400 D1 **Problem Set 5**

For each problem, copy the command that you used into the corresponding PDF text box.

P1. Select all of the restaurants in Manhattan.

```
db.restaurants.find({"borough": "Manhattan"})
```

P2. Select all of the restaurants in Manhattan, but only display the name of the restaurant and its type of cuisine.

```
db.restaurants.find({"borough": "Manhattan"}, {"name":1, "cuisine":1})
```

P3. Select all of the restaurants in Manhattan with a sanitation grade of 'A'

```
db.restaurants.find({"borough": "Manhattan", "grades.grade": "A"})
```

P4. Find the number of restaurants (just the number) in the database that are located in Manhattan.

```
db.restaurants.find( { "borough": "Manhattan" } ).count()
```

P5. Find the number of restaurants (just the number) in the database that are located either in Manhattan or in Queens.

```
db.restaurants.find({ $or: [ { "borough": "Manhattan" }, { "borough": "Queens" } ] })
```

P6. Update the Lexler Deli and change its address to 111 Short Street in Bronx. You can leave the zip code and lat/long coordinates alone.

```
db.restaurants.update({ "name" : "Lexler Deli" }, {$set: { "address.street": "111 Short Street", "borough":"Bronx" }})
```

P7. Insert a new restaurant with the following data:

Name: Maggie's Hideaway

Address: 1234 Commonwealth Ave, Boston MA 02215

Cuisine: Comfort

```
db.restaurants.insert({"address" : {"street" : "1234 Commonwealth Ave", "city" : "Boston", "state" : "MA", "zipcode" : "02215"}, "cuisine" : "Comfort", "name" : "Maggie's Hideaway"})
```

P8: Find all restaurants on Wall Street; sort them by score.

```
db.restaurants.find({"address.street": "Wall Street"}).sort({"grades.grade": 1})
```

P9: Find all restaurants on Wall Street; sort them by score. Display only the name and score.

```
db.restaurants.find({"address.street": "Wall Street"}, {"name":1, "grades.grade":1}).sort({"grades.grade": 1})
```

P10: Using the same method you used to load the sample restaurants database, load the collection at https://raw.githubusercontent.com/mongodb/docs-assets/geospatial/restaurants.json into the 'test' db, in a collection named geo.

Next, find the number of restaurants that are within a 1-mile radius of Morris Park Bake Shop. Copy and paste the lat/long of the bake shop rather than constructing a query to insert the lat/long.

```
db.geo.find({ location:{ $geoWithin: { $centerSphere: [ [ -73.856077,40.848447], 1 / 3963.2 ] } } })
```