

## CAS 412 MEAN PS5: Mongo Puzzles

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

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:{$elemMatch:{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: "Queens"},{borough: "Manhattan"}]}).count()
```

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.updateOne({name: "Lexler Deli"}, {$set: {address: {building: "111", street: "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.insertOne({name: "Maggie's Hideaway", address: {building: "1234", street: "Commonwealth Ave", zipcode: "02215", city: "Boston", state: "MA"}, cuisine: "Comfort"})
```

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

```
db.restaurants.find({ "address.street": "Wall Street" }).sort({"grades.0.score":-1})
```

*The .0 here allows me to only look at the first score in the grades array when sorting the restaurants, otherwise sorting doesn't work at all.*

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.score":1}).sort({"grades.0.score":-1})
```

*Couldn't put a filter on the scores displayed here. Tried \$ projection to grab the 0th score, tried grades.0 to get the 0th score (which resulted in a list of empty scores).*

P10 (no points, just for fun): 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.

*Started working on this but my function calls weren't returning anything in mongo. Had to move on.*