

In this lab, you will explore MongoDB.

Prerequisites:

1. Install mongodb 6.0.8
2. Install compass
3. Download mongoshell 1.10.1
4. Using mongoshell, create database mydb, and then create the collection Restaurants.
5. Using compass, import the restaurants.json file into the collection Restaurants.

To do:

1. What is the total number of documents in the collection Restaurants? Which command can you use to display it?
2. Which command can be used to add the following 2 documents to the collection?

```
{ "address": { "building": "1412", "coord": [-73.9866522, 40.7536411], "street": "Broadway", "zipcode": "10018"}, "borough": "Manhattan", "cuisine": "Sandwiches/Salads/Mixed Buffet", "grades": [ { "date": { "$date": 1397606400000 }, "grade": "A", "score": 5 }, { "date": { "$date": 1365724800000 }, "grade": "A", "score": 12 }, { "date": { "$date": 1334102400000 }, "grade": "A", "score": 13 }, { "date": { "$date": 1322784000000 }, "grade": "A", "score": 12 } ], "name": "Europa Cafe", "restaurant_id": "40900039" }
```



```
{ "address": { "building": "8405", "coord": [-74.02521709999999, 40.6224629], "street": "5 Avenue", "zipcode": "11209"}, "borough": "Brooklyn", "cuisine": "Chinese", "grades": [ { "date": { "$date": 1393286400000 }, "grade": "A", "score": 12 }, { "date": { "$date": 1376438400000 }, "grade": "C", "score": 28 }, { "date": { "$date": 1342569600000 }, "grade": "A", "score": 13 }, { "date": { "$date": 1331251200000 }, "grade": "A", "score": 13 }, { "date": { "$date": 1319673600000 }, "grade": "A", "score": 12 }, { "date": { "$date": 1305763200000 }, "grade": "A", "score": 13 } ], "name": "Chopstix Restaurant", "restaurant_id": "40900694" }
```
3. Write a MongoDB query to display all the documents in the collection Restaurants.
4. Write a MongoDB query to display the fields restaurant_id, name, borough and cuisine for all the documents in the collection Restaurants.
5. Write a MongoDB query to display the fields restaurant_id, name, borough and zip code, but exclude the field _id for all the documents in the collection restaurant.
6. Write a MongoDB query to display the first 5 restaurant which is in the borough Bronx.
7. Write a MongoDB query to find the restaurants who achieved a score more than 90.

8. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Wil' as first three letters for its name.
9. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan.
10. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6.
11. Write a MongoDB query to find the count of restaurants for each cuisine.