

# Assignment 3

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## Q1

Write a MongoDB query to display all the documents in the collection, restaurants.

*db.restaurants.find({}).pretty()*

```
> db.restaurants.find({}).pretty()
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141d"),
  "address" : {
    "building" : "2206",
    "coord" : [
      -74.1377286,
      40.6119572
    ],
    "street" : "Victory Boulevard",
    "zipcode" : "10314"
  },
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "grades" : [
    {
      "date" : ISODate("2014-10-06T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2014-05-20T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2013-04-04T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2012-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    }
  ],
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
}
```

## Q2

Write a MongoDB query to display the fields, restaurant\_id, name, borough, and cuisine for all documents in the collection, restaurant.

*db.restaurants.find({}, {'restaurant\_id':1, 'name':1, 'borough':1, 'cuisine':1}).pretty()*

```
> db.restaurants.find({}, {'restaurant_id':1, 'name':1, 'borough':1, 'cuisine':1}).pretty()
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141d"),
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
}
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141e"),
  "borough" : "Queens",
  "cuisine" : "American",
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141f"),
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe1420"),
  "borough" : "Brooklyn",
  "cuisine" : "American",
  "name" : "Riviera Caterer",
  "restaurant_id" : "40356018"
}
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe1421"),
  "borough" : "Brooklyn",
  "cuisine" : "Delicatessen",
  "name" : "Wilken'S Fine Food",
  "restaurant_id" : "40356483"
}
```

### Q3

Write a MongoDB query to display all restaurants which are in the borough, Queens.

*db.restaurants.find({'borough':'Queens'}).pretty()*

```

> db.restaurants.find({'borough':'Queens'}).pretty()
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141e"),
  "address" : {
    "building" : "8825",
    "coord" : [
      -73.8803827,
      40.7643124
    ],
    "street" : "Astoria Boulevard",
    "zipcode" : "11369"
  },
  "borough" : "Queens",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-11-15T00:00:00Z"),
      "grade" : "Z",
      "score" : 38
    },
    {
      "date" : ISODate("2014-05-02T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2013-03-02T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2012-02-10T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}

```

#### Q4

Write a MongoDB query to display the first 5 restaurants in the borough, Queens.

*db.restaurants.find({'borough':'Queens'}).limit(5).pretty()*

```

db.restaurants.find({'borough':'Queens'}).limit(5).pretty()
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe141e"),
  "address" : {
    "building" : "8825",
    "coord" : [
      -73.8803827,
      40.7643124
    ],
    "street" : "Astoria Boulevard",
    "zipcode" : "11369"
  },
  "borough" : "Queens",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-11-15T00:00:00Z"),
      "grade" : "Z",
      "score" : 38
    },
    {
      "date" : ISODate("2014-05-02T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2013-03-02T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2012-02-10T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
},
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe1423"),
  "address" : {
    "building" : "97-22",
    "coord" : [
      -73.8601152,
      40.7311739
    ],
    "street" : "Astoria Boulevard",
    "zipcode" : "11369"
  },
  "borough" : "Queens",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-11-15T00:00:00Z"),
      "grade" : "Z",
      "score" : 38
    },
    {
      "date" : ISODate("2014-05-02T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2013-03-02T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2012-02-10T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}

```

## Q5

Write a query to find all the Chinese restaurants in the borough, Brooklyn. Ideally print only the restaurant\_id, borough, and cuisine.

```
db.restaurants.find({'cuisine':'Chinese', 'borough':'Brooklyn'}, {'restaurant_id':1, 'borough':1, 'cuisine':1}).pretty()
```

```

db.restaurants.find({'cuisine':'Chinese', 'borough':'Brooklyn'}, {'restaurant_id':1, 'borough':1, 'cuisine':1}).pretty()

  " _id" : ObjectId("5bc5ec06f9e4a62619fe142a"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40358429"

  " _id" : ObjectId("5bc5ec06f9e4a62619fe144a"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40363920"

  " _id" : ObjectId("5bc5ec06f9e4a62619fe16cd"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40388386"

  " _id" : ObjectId("5bc5ec06f9e4a62619fe1715"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40390653"

  " _id" : ObjectId("5bc5ec06f9e4a62619fe173d"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40391528"

  " _id" : ObjectId("5bc5ec06f9e4a62619fe1775"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40393181"

  " _id" : ObjectId("5bc5ec07f9e4a62619fe186e"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40398688"

  " _id" : ObjectId("5bc5ec07f9e4a62619fe1878"),
    "borough" : "Brooklyn",
    "cuisine" : "Chinese",
    "restaurant_id" : "40398984"

```

## Q6

Write a query to find all restaurants that are not American cuisine and have a grades score of greater than 85.

```
db.restaurants.find({'grades.score' : {$gt : 85}, 'cuisine': {$ne: 'American'}}).pretty()
```

```

> db.restaurants.find({"grades.score" : {$gt : 85}, 'cuisine': {$ne: 'American'}}).pretty()
{
  "_id" : ObjectId("5bc5ec06f9e4a62619fe161a"),
  "address" : {
    "building" : "345",
    "coord" : [
      -73.9864626,
      40.7266739
    ],
    "street" : "East 6 Street",
    "zipcode" : "10003"
  },
  "borough" : "Manhattan",
  "cuisine" : "Indian",
  "grades" : [
    {
      "date" : ISODate("2014-09-15T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    },
    {
      "date" : ISODate("2014-01-14T00:00:00Z"),
      "grade" : "A",
      "score" : 8
    },
    {
      "date" : ISODate("2013-05-30T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2013-04-24T00:00:00Z"),
      "grade" : "P",
      "score" : 2
    },
    {
      "date" : ISODate("2012-10-01T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2012-04-06T00:00:00Z"),
      "grade" : "C",
      "score" : 92
    },
    {
      "date" : ISODate("2011-11-03T00:00:00Z"),
      "grade" : "C",
      "score" : 41
    }
  ],
  "name" : "Gandhi",
  "restaurant_id" : "40381295"
}

```