

## Assignment 3 – Queries

1.

```
> db.address.find().pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc55f9"),
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "grades" : [
    {
      "date" : ISODate("2014-03-03T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-09-11T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2013-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2011-11-23T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    }
  ]
}
```

2.

```
> db.address.find({}, {_id:1, name:1, cuisine: 1, borough: 1, restaurant_id: 1})
{ "_id" : ObjectId("610784363bfc6f4312bc55f9"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
{ "_id" : ObjectId("610784363bfc6f4312bc55fa"), "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("610784363bfc6f4312bc55fb"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
{ "_id" : ObjectId("610784363bfc6f4312bc55fc"), "borough" : "Brooklyn", "cuisine" : "American", "name" : "Riviera Caterer", "restaurant_id" : "40356019" }
{ "_id" : ObjectId("610784363bfc6f4312bc55fd"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("610784363bfc6f4312bc55fe"), "borough" : "Queens", "cuisine" : "American", "name" : "Brunos On The Boulevard", "restaurant_id" : "40356151" }
{ "_id" : ObjectId("610784363bfc6f4312bc55ff"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("610784363bfc6f4312bc5600"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("610784363bfc6f4312bc5601"), "borough" : "Brooklyn", "cuisine" : "American", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("610784363bfc6f4312bc5602"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("610784363bfc6f4312bc5603"), "borough" : "Bronx", "cuisine" : "American", "name" : "Wild Asia", "restaurant_id" : "40357217" }
{ "_id" : ObjectId("610784363bfc6f4312bc5604"), "borough" : "Brooklyn", "cuisine" : "American", "name" : "C & C Catering Service", "restaurant_id" : "40357437" }
{ "_id" : ObjectId("610784363bfc6f4312bc5605"), "borough" : "Brooklyn", "cuisine" : "Chinese", "name" : "May May Kitchen", "restaurant_id" : "40358429" }
{ "_id" : ObjectId("610784363bfc6f4312bc5606"), "borough" : "Manhattan", "cuisine" : "American", "name" : "1 East 66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("610784363bfc6f4312bc5607"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("610784363bfc6f4312bc5608"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("610784363bfc6f4312bc5609"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("610784363bfc6f4312bc560a"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Nordic Delicacies", "restaurant_id" : "40361390" }
{ "_id" : ObjectId("610784363bfc6f4312bc560b"), "borough" : "Manhattan", "cuisine" : "American", "name" : "Glorious Food", "restaurant_id" : "40361521" }
{ "_id" : ObjectId("610784363bfc6f4312bc560c"), "borough" : "Brooklyn", "cuisine" : "American", "name" : "The Movable Feast", "restaurant_id" : "40361606" }
type "it" for more
>
```

3.

```
> db.address.find({}, {_id:0, name:1, cuisine: 1, borough: 1, restaurant_id: 1}).pretty()
{
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "Hamburgers",
  "name" : "Wendy'S",
  "restaurant_id" : "30112340"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "name" : "Riviera Caterer",
  "restaurant_id" : "40356018"
}
{
  "borough" : "Queens",
  "cuisine" : "Jewish/Kosher",
  "name" : "Tov Kosher Kitchen",
  "restaurant_id" : "40356068"
}
{
  "borough" : "Queens",
  "cuisine" : "American ",
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}
{
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
}
```

3

```
> db.address.find({}, {_id:0, name:1, cuisine: 1, borough: 1, restaurant_id: 1, "address.zipcode": 1}).pretty()
{
  "address" : {
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "address" : {
    "zipcode" : "11225"
  },
  "borough" : "Brooklyn",
  "cuisine" : "Hamburgers",
  "name" : "Wendy'S",
  "restaurant_id" : "30112340"
}
{
  "address" : {
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "address" : {
    "zipcode" : "11224"
  },
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "name" : "Riviera Caterer",
  "restaurant_id" : "40356018"
}
{
  "address" : {
    "zipcode" : "11374"
  },
  "borough" : "Queens",
  "cuisine" : "Jewish/Kosher",
  "name" : "Tov Kosher Kitchen",
  "restaurant_id" : "40356068"
}
{
  "address" : {
```

4.

```
> db.address.find({}, {_id:0, name:1, cuisine: 1, borough: 1, restaurant_id: 1, "address.zipcode": 1}).pretty()
{
  "address" : {
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "address" : {
    "zipcode" : "11225"
  },
  "borough" : "Brooklyn",
  "cuisine" : "Hamburgers",
  "name" : "Wendy'S",
  "restaurant_id" : "30112340"
}
{
  "address" : {
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "address" : {
    "zipcode" : "11224"
  },
  "borough" : "Brooklyn",
  "cuisine" : "American ",
```

6.

```
> db.address.find({"borough" : "Bronx"}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc55f9"),
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "grades" : [
    {
      "date" : ISODate("2014-03-03T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-09-11T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2013-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2011-11-23T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2011-03-10T00:00:00Z"),
      "grade" : "B",
      "score" : 14
    }
  ],
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "_id" : ObjectId("610784363bfc6f4312bc5603"),
  "address" : {
    "building" : "2300",
```

```

> db.address.find({"borough" : "Bronx"}).limit(5).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc55f9"),
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "grades" : [
    {
      "date" : ISODate("2014-03-03T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-09-11T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2013-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2011-11-23T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2011-03-10T00:00:00Z"),
      "grade" : "B",
      "score" : 14
    }
  ],
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "_id" : ObjectId("610784363bfc6f4312bc5603"),
  "address" : {
    "building" : "2300",

```

```

> db.address.find({"borough" : "Bronx"}).skip(5).limit(5).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc5636"),
  "address" : {
    "building" : "658",
    "coord" : [
      -73.81363999999999,
      40.82941100000001
    ],
    "street" : "Clarence Ave",
    "zipcode" : "10465"
  },
  "borough" : "Bronx",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-06-21T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    },
    {
      "date" : ISODate("2012-07-11T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    }
  ],
  "name" : "Manhem Club",
  "restaurant_id" : "40364363"
}
{
  "_id" : ObjectId("610784363bfc6f4312bc564e"),
  "address" : {
    "building" : "2222",
    "coord" : [
      -73.84971759999999,
      40.8304811
    ],
    "street" : "Haviland Avenue",
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "American ",

```

```

> db.address.find({"grades.score" : {"$gt" : 90}}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc5757"),
  "address" : {
    "building" : "65",
    "coord" : [
      -73.9782725,
      40.7624022
    ],
    "street" : "West 54 Street",
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-08-22T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2014-03-28T00:00:00Z"),
      "grade" : "C",
      "score" : 131
    },
    {
      "date" : ISODate("2013-09-25T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {

```

```

> db.address.find({$and : [{"grades.score" : {"$gt" : 80}}, {"grades.score" : {"$lt" : 100}}]}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc5757"),
  "address" : {
    "building" : "65",
    "coord" : [
      -73.9782725,
      40.7624022
    ],
    "street" : "West 54 Street",
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-08-22T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2014-03-28T00:00:00Z"),
      "grade" : "C",
      "score" : 131
    },
    {
      "date" : ISODate("2013-09-25T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2013-04-08T00:00:00Z"),
      "grade" : "B",
      "score" : 25
    },
    {
      "date" : ISODate("2012-10-15T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2011-10-19T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "Murals On 54/Randolphs'S",
  "restaurant_id" : "40372466"
}

```



```

> db.address.find({"address.coord.0" : {$lt : -95.754168}}).pretty()
{
  "_id" : ObjectId("610784383bfc6f4312bc5c41"),
  "address" : {
    "building" : "3707",
    "coord" : [
      -101.8945214,
      33.5197474
    ],
    "street" : "82 Street",
    "zipcode" : "11372"
  },
  "borough" : "Queens",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-06-04T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2013-11-07T00:00:00Z"),
      "grade" : "B",
      "score" : 19
    },
    {
      "date" : ISODate("2013-05-17T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2013-08-20T00:00:00Z")
    }
  ]
}

```

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```
> db.address.find({'$and': [{'cuisine': {'$ne': 'American'}}, {'address.coord.0': {'$lt': -65.754168}}, {'grades.score': {'$gt': 70}}]).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc57f8"),
  "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"),
```

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```
> db.address.find({'cuisine':{'$ne':'American'}, 'grades.score':{'$gt':70}, 'address.coord':{'$lt': -65.754168}}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc5757"),
  "address" : {
    "building" : "65",
    "coord" : [
      -73.9782725,
      40.7624022
    ],
    "street" : "West 54 Street",
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-08-22T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2014-03-28T00:00:00Z"),
      "grade" : "C",
      "score" : 131
    },
    {
      "date" : ISODate("2013-09-25T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2013-04-08T00:00:00Z"),
      "grade" : "B",
      "score" : 25
    },
    {
      "date" : ISODate("2012-10-15T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2011-10-19T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ]
}
```

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```
> db.address.find({$and: [{ "cuisine" : {$ne : "American "}}, {"grades.grade" : "A"}, {"borough" : {$ne : "Brooklyn "}}]}).sort({cuisine : -1}).pretty()
{
  "_id" : ObjectId("610784383bfc6f4312bc5d05"),
  "address" : {
    "building" : "89",
    "coord" : [
      -73.9995899,
      40.7168015
    ],
    "street" : "Baxter Street",
    "zipcode" : "10013"
  },
  "borough" : "Manhattan",
  "cuisine" : "Vietnamese/Cambodian/Malaysia",
  "grades" : [
    {
      "date" : ISODate("2014-08-21T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    },
    {
      "date" : ISODate("2013-08-31T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    },
    {
      "date" : ISODate("2013-04-11T00:00:00Z"),
      "grade" : "C",
      "score" : 3
    },
    {
      "date" : ISODate("2012-10-17T00:00:00Z"),
      "grade" : "A",
      "score" : 4
    },
    {
      "date" : ISODate("2012-05-15T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    }
  ],
  "name" : "Thai Son",
}
```

14.

```
> db.address.find({"name" : { $regex: /^Wil.*$/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Brooklyn",
  "cuisine" : "Delicatessen",
  "name" : "Wilken'S Fine Food",
  "restaurant_id" : "40356483"
}
{
  "borough" : "Bronx",
  "cuisine" : "American ",
  "name" : "Wild Asia",
  "restaurant_id" : "40357217"
}
{
  "borough" : "Bronx",
  "cuisine" : "Pizza",
  "name" : "Wilbel Pizza",
  "restaurant_id" : "40871979"
}
>
```

15.

```
> db.address.find({"name" : { $regex: /.ces$/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Pieces",
  "restaurant_id" : "40399910"
}
{
  "borough" : "Queens",
  "cuisine" : "American ",
  "name" : "S.M.R Restaurant Services",
  "restaurant_id" : "40403857"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Good Shepherd Services",
  "restaurant_id" : "40403989"
}
{
  "borough" : "Queens",
  "cuisine" : "Ice Cream, Gelato, Yogurt, Ices",
  "name" : "The Ice Box-Ralph'S Famous Italian Ices",
  "restaurant_id" : "40690899"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "Jewish/Kosher",
  "name" : "Alices",
  "restaurant_id" : "40782042"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Re: Sources",
  "restaurant_id" : "40876068"
}
```

16.

```
> db.address.find({"name" : { $regex: /Reg/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "name" : "Regina Caterers",
  "restaurant_id" : "40356649"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Café/Coffee/Tea",
  "name" : "Caffe Reggio",
  "restaurant_id" : "40369418"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Regency Hotel",
  "restaurant_id" : "40382679"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Regency Whist Club",
  "restaurant_id" : "40402377"
}
{
  "borough" : "Queens",
  "cuisine" : "American ",
  "name" : "Rego Park Cafe",
  "restaurant_id" : "40523342"
}
{
  "borough" : "Queens",
  "cuisine" : "Pizza",
  "name" : "Regina Pizza",
  "restaurant_id" : "40801325"
}
```

17.

```
> db.address.find({borough: "Bronx", cuisine: {$in: ["American ", "Chinese"]}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Bronx",
  "cuisine" : "American ",
  "name" : "Wild Asia",
  "restaurant_id" : "40357217"
}
{
  "borough" : "Bronx",
  "cuisine" : "Chinese",
  "name" : "Happy Garden",
  "restaurant_id" : "40363289"
}
{
  "borough" : "Bronx",
  "cuisine" : "Chinese",
  "name" : "Happy Garden",
  "restaurant_id" : "40364296"
}
{
  "borough" : "Bronx",
  "cuisine" : "American ",
  "name" : "Manhem Club",
  "restaurant_id" : "40364363"
}
{
  "borough" : "Bronx",
  "cuisine" : "American ",
  "name" : "The New Starling Athletic Club Of The Bronx",
  "restaurant_id" : "40364956"
}
```

18.

```
> db.address.find({$or: [{"borough": "Staten Island"}, {"borough": "Bronx Brooklyn"}, {"borough": "Queens"}]}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Queens",
  "cuisine" : "Jewish/Kosher",
  "name" : "Tov Kosher Kitchen",
  "restaurant_id" : "40356068"
}
{
  "borough" : "Queens",
  "cuisine" : "American ",
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}
{
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
}
{
  "borough" : "Queens",
  "cuisine" : "Ice Cream, Gelato, Yogurt, Ices",
  "name" : "Carvel Ice Cream",
  "restaurant_id" : "40361322"
}
```

19

```
> db.address.find( {borough: {$nin: ["Staten Island","Queens","Bronx","Brooklyn"]}} , {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "1 East 66Th Street Kitchen",
  "restaurant_id" : "40359480"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Glorious Food",
  "restaurant_id" : "40361521"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Delicatessen",
  "name" : "Bully'S Deli",
  "restaurant_id" : "40361708"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Chicken",
  "name" : "Harriet'S Kitchen",
  "restaurant_id" : "40362098"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "P & S Deli Grocery",
  "restaurant_id" : "40362264"
}
{
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Angelika Film Center",
  "restaurant_id" : "40362274"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Turkish",
  "name" : "The Country Cafe",
  "restaurant_id" : "40362715"
}
```

20

```
> db.address.find({"grades.score": {$lte: 10}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "Hamburgers",
  "name" : "Wendy'S",
  "restaurant_id" : "30112340"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "name" : "Riviera Caterer",
  "restaurant_id" : "40356018"
}
{
  "borough" : "Queens",
  "cuisine" : "American ",
  "name" : "Brunos On The Boulevard",
  "restaurant_id" : "40356151"
}
{
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "Delicatessen",
  "name" : "Wilken'S Fine Food",
  "restaurant_id" : "40356483"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "name" : "Regina Caterers",
  "restaurant_id" : "40356649"
```

21

```
> db.address.find({$nor: [{cuisine: {$in: ["American ", "Chinese"]}], {name: /^Wil./}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1}).pretty()
{
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "borough" : "Brooklyn",
  "cuisine" : "Hamburgers",
  "name" : "Wendy'S",
  "restaurant_id" : "30112340"
}
{
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "borough" : "Queens",
  "cuisine" : "Jewish/Kosher",
  "name" : "Tov Kosher Kitchen",
  "restaurant_id" : "40356068"
}
{
  "borough" : "Staten Island",
  "cuisine" : "Jewish/Kosher",
  "name" : "Kosher Island",
  "restaurant_id" : "40356442"
```

22.

```
> db.address.find({"grades" : {$elemMatch: {"date": ISODate("2014-08-11T00:00:00Z"), "grade": "A", "score": 11}}}, {_id:0, restaurant_id:1, name:1, grades:1}).pretty()
{
  "grades" : [
    {
      "date" : ISODate("2014-08-11T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2013-12-10T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2013-06-10T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2012-06-08T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    },
    {
      "date" : ISODate("2012-01-25T00:00:00Z"),
      "grade" : "A",
      "score" : 8
    },
    {
      "date" : ISODate("2011-09-13T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    }
  ],
  "name" : "Don Filippo Restaurant",
  "restaurant_id" : "40372417"
}
```

23.

```
> db.address.find({$and: [{"grades.1.grade": "A"}, {"grades.1.score": 9}, {"grades.1.date": ISODate("2014-08-11T00:00:00Z")}]}, {_id:0, restaurant_id:1, name:1, grades:1}).pretty()
{
  "grades" : [
    {
      "date" : ISODate("2015-01-12T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2014-08-11T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2014-01-14T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    },
    {
      "date" : ISODate("2013-02-07T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2012-04-30T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    }
  ],
  "name" : "Club Macanudo (Cigar Bar)",
  "restaurant_id" : "40526406"
}
```



24.

```
> db.address.find({$and : [{ "address.coord.1" : { $gt : 42 } }, { "address.coord.1" : { $lte : 52 } } ] }, { _id:0, restaurant_id:1, name:1, address:1 }).pretty()
{
  "address" : {
    "building" : "47",
    "coord" : [
      -78.877224,
      42.89546199999999
    ],
    "street" : "Broadway @ Trinity Pl",
    "zipcode" : "10006"
  },
  "name" : "T.G.I. Friday'S",
  "restaurant_id" : "40387990"
}
{
  "address" : {
    "building" : "1",
    "coord" : [
      -0.7119979,
      51.6514664
    ],
    "street" : "Pennplaza E, Penn Sta",
    "zipcode" : "10001"
  },
  "name" : "T.G.I. Fridays",
  "restaurant_id" : "40388936"
}
{
  "address" : {
    "building" : "3000",
    "coord" : [
      -87.86567699999999,
      42.61150920000001
    ],
    "street" : "47 Avenue",
    "zipcode" : "11101"
  },
  "name" : "Di Luvio'S Deli",
  "restaurant_id" : "40402284"
}
{
  "address" : {
    "building" : "21972199",
    "coord" : [
      -78.589606,
      42.8912372
    ],
    "street" : "Broadway",
  }
```

```
> db.address.find({}, {_id:0, name:1}).sort( {name: 1})
{ "name" : "(Lewis Drug Store) Locanda Vini E Olii" }
{ "name" : "1 East 66Th Street Kitchen" }
{ "name" : "101 Deli" }
{ "name" : "101 Restaurant And Bar" }
{ "name" : "1020 Bar" }
{ "name" : "104-01 Foster Avenue Coffee Shop(Ups)" }
{ "name" : "10Th Avenue Pizza & Cafe" }
{ "name" : "111 Restaurant" }
{ "name" : "15 East Restaurant" }
{ "name" : "200 Fifth Avenue Restaurant & Sports Bar" }
{ "name" : "21 Club" }
{ "name" : "2A" }
{ "name" : "3 Deli & Grill" }
{ "name" : "3 Guys" }
{ "name" : "3 Guys Resturant" }
{ "name" : "42Nd Street Pizza Diner" }
{ "name" : "44 & X Hell'S Kitchen" }
{ "name" : "44 Sw Ristorante & Bar" }
{ "name" : "5 Burro Cafe" }
{ "name" : "525 Lex Restaurant & Bar" }
Type "it" for more
>
```

```
> db.address.find({}, {_id:0, name:1}).sort( {name: -1})
{ "name" : "Zum Stammtisch" }
{ "name" : "Zum Schneider" }
{ "name" : "Zorba'S" }
{ "name" : "Zebu Grill" }
{ "name" : "Zaro'S Bread Basket" }
{ "name" : "Zaro'S Bread Basket" }
{ "name" : "Zaro'S Bread Basket" }
{ "name" : "Zaro'S Bread Basket" }
{ "name" : "Zaro'S Bread Basket" }
{ "name" : "Zaro'S Bakery" }
{ "name" : "Zaro'S Bakery" }
{ "name" : "Zafi'S Luncheonette" }
{ "name" : "Yvonne Yvonne Restaurant" }
{ "name" : "Yura & Company On Madison" }
{ "name" : "Yummy Kitchen" }
{ "name" : "Your Bakery" }
{ "name" : "Yonah Shimmels Knishes" }
{ "name" : "Yolanda Pizzeria Restaurant" }
{ "name" : "Yip'S" }
{ "name" : "Yen Yen Restaurant" }
Type "it" for more
>
```

[illegible]

## 28. First Condition

```
> db.address.find({"address.street": {$regex: /Street/}}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc55fb"),
  "address" : {
    "building" : "351",
    "coord" : [
      -73.98513559999999,
      40.7676919
    ],
    "street" : "West 57 Street",
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "Irish",
  "grades" : [
    {
      "date" : ISODate("2014-09-06T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-07-22T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2012-07-31T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2011-12-29T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    }
  ],
  "name" : "Dj Reynolds Pub And Restaurant",
  "restaurant_id" : "30191841"
}
{
  "_id" : ObjectId("610784363bfc6f4312bc5606"),
```

## 28.second condition

```
> db.address.find({"address.street": {$ne: {$regex: /Street/}}}).pretty()
{
  "_id" : ObjectId("610784363bfc6f4312bc55f9"),
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  },
  "borough" : "Bronx",
  "cuisine" : "Bakery",
  "grades" : [
    {
      "date" : ISODate("2014-03-03T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-09-11T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2013-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2011-11-23T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    }
  ]
}
```

```

> db.address.find({"address.coord": {$type: "double"}}).pretty()
{
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  }
}
{
  "address" : {
    "building" : "469",
    "coord" : [
      -73.961704,
      40.662942
    ],
    "street" : "Flatbush Avenue",
    "zipcode" : "11225"
  }
}
{
  "address" : {
    "building" : "351",
    "coord" : [
      -73.98513559999999,
      40.7676919
    ],
    "street" : "West 57 Street",
    "zipcode" : "10019"
  }
}
{
  "address" : {
    "building" : "2780",
    "coord" : [
      -73.98241999999999,
      40.579505
    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
  }
}
{
  "address" : {
    "building" : "97-22",
    "coord" : [

```

```

> db.address.find({"grades": {$elemMatch: {"score": {$mod: [7,0]}}}}, {_id:0, restaurant_id:1, name:1, grades:1}).pretty()
{
  "grades" : [
    {
      "date" : ISODate("2014-03-03T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-09-11T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2013-01-24T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2011-11-23T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2011-03-10T00:00:00Z"),
      "grade" : "B",
      "score" : 14
    }
  ],
  "name" : "Morris Park Bake Shop",
  "restaurant_id" : "30075445"
}
{
  "grades" : [
    {
      "date" : ISODate("2014-06-10T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    }
  ]
}

```

```
> db.address.find({name: {$regex: /mon/}}, {_id:0, name:1, borough:1, "address.coord":1, cuisine:1}).pretty()
{
  "address" : {
    "coord" : [
      -73.98306099999999,
      40.7441419
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Desmond'S Tavern"
}
{
  "address" : {
    "coord" : [
      -73.8221418,
      40.7272376
    ]
  },
  "borough" : "Queens",
  "cuisine" : "Jewish/Kosher",
  "name" : "Shimons Kosher Pizza"
}
{
  "address" : {
    "coord" : [
      -74.10465599999999,
      40.58834
    ]
  },
  "borough" : "Staten Island",
  "cuisine" : "American ",
  "name" : "Richmond County Country Club"
}
{
  "address" : {
    "coord" : [
      -73.9812843,
      40.5947365
    ]
  },
  "borough" : "Brooklyn",
  "cuisine" : "Pizza/Italian",
  "name" : "Lb Spumoni Gardens"
}
```



```

> db.address.find({name: {$regex: /^Mad.*$/}}, {_id:0, name:1, borough:1, "address.coord":1, cuisine:1}).pretty()
{
  "address" : {
    "coord" : [
      -73.9860597,
      40.7431194
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Madison Square"
}
{
  "address" : {
    "coord" : [
      -73.98302199999999,
      40.742313
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "Indian",
  "name" : "Madras Mahal"
}
{
  "address" : {
    "coord" : [
      -74.000002,
      40.72735
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Madame X"
}
{
  "address" : {
    "coord" : [
      -73.98171959999999,
      40.7499406
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "French",
  "name" : "Madison Bistro"
}
{

```