

## MongoDB – Complex Queries

### MongoDB Exercises – With the Restaurants Data set

#### Exercise Question

- 1) Display all documents in the collection restaurants

```
> use restaurants
switched to db restaurants
> show dbs
admin          0.000GB
config         0.000GB
local          0.000GB
population     0.002GB
restaurants    0.001GB
> show collections
addresses
> db.addresses.find().pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"),
  "address" : {
    "building" : "2780",
    "coord" : [
      -73.98241999999999,
      40.579505
    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
```

```

    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
  },
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-06-10T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    },
    {
      "date" : ISODate("2013-06-05T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2012-04-13T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2011-10-12T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    }
  ]
},
],

```

## 2) Display restaurant\_id, name, borough, and cuisine in the collection restaurant.

```

> db.addresses.find({}, {"restaurant_id":1, "name":1, "borough":1, "cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera
Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ca"), "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'
S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" :
"Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cc"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynold
s Pub And Restaurant", "restaurant_id" : "30191841" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cd"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov K
osher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilk
en'S Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park B
ake Shop", "restaurant_id" : "30075445" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d0"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia"
, "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d1"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ic
es", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d2"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "1 East
66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d3"), "borough" : "Brooklyn", "cuisine" : "Chinese", "name" : "May May K
itchen", "restaurant_id" : "40358429" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d4"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina
Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d5"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seu
da Foods", "restaurant_id" : "40360045" }

```

- 3) Display fields restaurant\_id, name, borough and cuisine, but exclude the \_id field for documents in collection restaurant.

```
{ "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
{ "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
{ "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356442" }
{ "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
```

- 4) Display fields restaurant\_id, name, borough and zipcode, but exclude the \_id field for documents in collection restaurant.

```
> db.addresses.find({}, {"restaurant_id":1,"name":1,"borough":1,"address.zipcode":1,"_id":0})
{ "address" : { "zipcode" : "11224" }, "borough" : "Brooklyn", "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
{ "address" : { "zipcode" : "11225" }, "borough" : "Brooklyn", "name" : "Wendy'S", "restaurant_id" : "30112340" }
{ "address" : { "zipcode" : "10314" }, "borough" : "Staten Island", "name" : "Kosher Island", "restaurant_id" : "40356442" }
{ "address" : { "zipcode" : "10019" }, "borough" : "Manhattan", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
{ "address" : { "zipcode" : "11374" }, "borough" : "Queens", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356068" }
{ "address" : { "zipcode" : "11234" }, "borough" : "Brooklyn", "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }
{ "address" : { "zipcode" : "10462" }, "borough" : "Bronx", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
```

- 5) To display first 5 restaurants in the borough Bronx.

```
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "address" : { "building" : "1007", "coord" : [ -73.856077, 40.848417 ], "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("6108c408c7dbac3cf2a5a7d0"), "address" : { "building" : "2300", "coord" : [ -73.8786113, 40.850883 ], "street" : "Southern Boulevard", "zipcode" : "10460" }, "borough" : "Bronx", "cuisine" : "American ", "grades" : [ { "date" : ISODate("2014-05-28T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2013-06-19T00:00:00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate("2012-06-15T00:00:00Z"), "grade" : "A", "score" : 3 } ], "name" : "Wild Asia", "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ea"), "address" : { "building" : "1006", "coord" : [ -73.84856870000002, 40.8903781 ], "street" : "East 233 Street", "zipcode" : "10466" }, "borough" : "Bronx", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "grades" : [ { "date" : ISODate("2014-04-24T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-09-05T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-02-21T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate("2012-07-03T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2011-07-11T00:00:00Z"), "grade" : "A", "score" : 5 } ], "name" : "Carvel Ice Cream", "restaurant_id" : "40363093" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7eb"), "address" : { "building" : "1236", "coord" : [ -73.8893654, 40.81376179999999 ], "street" : "238 Spofford Ave", "zipcode" : "10474" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2013-12-30T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-01-08T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-06-12T00:00:00Z"), "grade" : "B", "score" : 15 } ], "name" : "Happy Garden", "restaurant_id" : "40363289" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7fc"), "address" : { "building" : "277", "coord" : [ -73.8941893, 40.8634684 ], "street" : "East Kingsbridge Road", "zipcode" : "10458" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2014-03-03T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-09-26T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-03-19T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-08-29T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2011-08-17T00:00:00Z"), "grade" : "A", "score" : 13 } ], "name" : "Happy Garden", "restaurant_id" : "40364296" }
```

- 6) Display all the restaurants in the borough Bronx.

```
> db.addresses.find({borough:"Bronx"})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "address" : { "building" : "1007", "coord" : [ -73.856077, 40.8484
47 ], "street" : "Morris Park Ave", "zipcode" : "10462" }, "borough" : "Bronx", "cuisine" : "Bakery", "grades" : [
{ "date" : ISODate("2014-03-03T00:00:00Z"), "grade" : "A", "score" : 2 }, { "date" : ISODate("2013-09-11T00:00:00
Z"), "grade" : "A", "score" : 6 }, { "date" : ISODate("2013-01-24T00:00:00Z"), "grade" : "A", "score" : 10 }, { "d
ate" : 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("6108c408c7dbac3cf2a5a7d0"), "address" : { "building" : "2300", "coord" : [ -73.8786113, 40.850
2883 ], "street" : "Southern Boulevard", "zipcode" : "10460" }, "borough" : "Bronx", "cuisine" : "American ", "gra
des" : [ { "date" : ISODate("2014-05-28T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2013-06-19
T00:00:00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate("2012-06-15T00:00:00Z"), "grade" : "A", "score" : 3
} ], "name" : "Wild Asia", "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ea"), "address" : { "building" : "1006", "coord" : [ -73.84856870000002,
40.8903781 ], "street" : "East 233 Street", "zipcode" : "10466" }, "borough" : "Bronx", "cuisine" : "Ice Cream, G
elato, Yogurt, Ices", "grades" : [ { "date" : ISODate("2014-04-24T00:00:00Z"), "grade" : "A", "score" : 10 }, { "d
ate" : ISODate("2013-09-05T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-02-21T00:00:00Z"),
"grade" : "A", "score" : 9 }, { "date" : ISODate("2012-07-03T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date"
: ISODate("2011-07-11T00:00:00Z"), "grade" : "A", "score" : 5 } ], "name" : "Carvel Ice Cream", "restaurant_id" :
"40363093" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7eb"), "address" : { "building" : "1236", "coord" : [ -73.8893654, 40.813
76179999999 ], "street" : "238 Spofford Ave", "zipcode" : "10474" }, "borough" : "Bronx", "cuisine" : "Chinese", "
grades" : [ { "date" : ISODate("2013-12-30T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-01-
08T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-06-12T00:00:00Z"), "grade" : "B", "score"
: 15 } ], "name" : "Happy Garden", "restaurant_id" : "40363289" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7fc"), "address" : { "building" : "277", "coord" : [ -73.8941893, 40.8634
684 ], "street" : "East Kingsbridge Road", "zipcode" : "10458" }, "borough" : "Bronx", "cuisine" : "Chinese", "gra
des" : [ { "date" : ISODate("2014-03-03T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-09-26
T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-03-19T00:00:00Z"), "grade" : "A", "score" :
10 }, { "date" : ISODate("2012-08-29T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2011-08-17T00
:00:00Z"), "grade" : "A", "score" : 13 } ], "name" : "Happy Garden", "restaurant_id" : "40364296" }
```

## 7) Display next 5 restaurants after skipping first 5

```
> db.addresses.find({borough:"Bronx"}).skip(5).limit(5)
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a802"), "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("6108c408c7dbac3cf2a5a81b"), "address" : { "building" : "2222", "coord" : [ -73.84971759999999,
40.8304811 ], "street" : "Haviland Avenue", "zipcode" : "10462" }, "borough" : "Bronx", "cuisine" : "American ",
"grades" : [ { "date" : ISODate("2014-12-18T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2014-05
-01T00:00:00Z"), "grade" : "B", "score" : 17 }, { "date" : ISODate("2013-03-14T00:00:00Z"), "grade" : "A", "score"
: 12 }, { "date" : ISODate("2012-09-20T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate("2012-02-08T
00:00:00Z"), "grade" : "B", "score" : 19 } ], "name" : "The New Starling Athletic Club Of The Bronx", "restaurant_
id" : "40364956" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a837"), "address" : { "building" : "72", "coord" : [ -73.92506, 40.8275556
], "street" : "East 161 Street", "zipcode" : "10451" }, "borough" : "Bronx", "cuisine" : "American ", "grades" :
[ { "date" : ISODate("2014-04-15T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate("2013-11-14T00:00:
00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate("2013-07-29T00:00:00Z"), "grade" : "A", "score" : 10 }, {
"date" : ISODate("2012-12-31T00:00:00Z"), "grade" : "B", "score" : 15 }, { "date" : ISODate("2012-05-30T00:00:00Z"
), "grade" : "A", "score" : 13 }, { "date" : ISODate("2012-01-09T00:00:00Z"), "grade" : "A", "score" : 10 }, { "da
te" : ISODate("2011-08-15T00:00:00Z"), "grade" : "C", "score" : 37 } ], "name" : "Yankee Tavern", "restaurant_id"
: "40365499" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a849"), "address" : { "building" : "331", "coord" : [ -73.87786539999999,
40.8724377 ], "street" : "East 204 Street", "zipcode" : "10467" }, "borough" : "Bronx", "cuisine" : "Irish", "gra
des" : [ { "date" : ISODate("2014-08-26T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2014-03-26
T00:00:00Z"), "grade" : "B", "score" : 23 }, { "date" : ISODate("2013-09-11T00:00:00Z"), "grade" : "A", "score" :
13 }, { "date" : ISODate("2012-12-18T00:00:00Z"), "grade" : "B", "score" : 27 }, { "date" : ISODate("2011-10-20T00
:00:00Z"), "grade" : "A", "score" : 13 } ], "name" : "Mcdwyers Pub", "restaurant_id" : "40365893" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a862"), "address" : { "building" : "5820", "coord" : [ -73.9002615, 40.885
186 ], "street" : "Broadway", "zipcode" : "10463" }, "borough" : "Bronx", "cuisine" : "American ", "grades" : [ {
"date" : ISODate("2014-02-26T00:00:00Z"), "grade" : "A", "score" : 5 }, { "date" : ISODate("2013-10-09T00:00:00Z")
, "grade" : "B", "score" : 19 }, { "date" : ISODate("2013-05-15T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date"
```

## 8) Find the restaurants who achieved a score more than 90

```

> db.addresses.find({"grades.score":{$gt:90}}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5a927"),
  "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
    }
  ],
}

```

9) Restaurants that achieved more than 80 but less than 100

```

> db.addresses.find({"grades.score":{$gt:80,$lt:100}}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5a927"),
  "address" : {
    "building" : "65",
    "coord" : [
      -73.9782725,
      40.7624022
    ],
    "street" : "West 54 Street",
    "zipcode" : "10019"
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
}

```

10) Restaurant which locate in latitude value less than -95.754168



```
> db.addresses.find({"address.coord":{"lt":-95.754168}})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ae0d"), "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("2012-08-29T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2012-04-03T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2011-11-16T00:00:00Z"), "grade" : "A", "score" : 7 } ], "name" : "Burger King", "restaurant_id" : "40534067" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b17e"), "address" : { "building" : "15259", "coord" : [ -119.6368672, 36.2504996 ], "street" : "10 Avenue", "zipcode" : "11357" }, "borough" : "Queens", "cuisine" : "Italian", "grades" : [ { "date" : ISODate("2014-09-04T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2014-03-26T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-03-04T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-09-27T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-04-20T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2011-11-23T00:00:00Z"), "grade" : "C", "score" : 34 } ], "name" : "Cascarino'S", "restaurant_id" : "40668681" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b623"), "address" : { "building" : "60", "coord" : [ -111.9975205, 42.0970258 ], "street" : "West Side Highway", "zipcode" : "10006" }, "borough" : "Manhattan", "cuisine" : "Japanese", "grades" : [ { "date" : ISODate("2014-03-20T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate("2013-06-28T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2012-07-05T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2011-07-27T00:00:00Z"), "grade" : "A", "score" : 2 } ], "name" : "Sports Center At Chelsea Piers (Sushi Bar)", "restaurant_id" : "40882356" }
>
```

- 11) Restaurants that do not prepare cuisine of "American" and grade score more than 70 and located in latitude less than -65.754168

```
> db.addresses.find({"and":[{"cuisine":{"ne":"American"}}, {"grades.score":{"gt":70}}, {"address.coord":{"lt":-65.754168}}])
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a927"), "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" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a9c9"), "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" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aa57"), "address" : { "building" : "14", "coord" : [ -73.9883909, 40.740735 ], "street" : "East 23 Street", "zipcode" : "10010" }, "borough" : "Manhattan", "cuisine" : "American ", "grades" : [ { "date" : ISODate("2014-10-28T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate("2014-04-10T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2013-08-08T00:00:00Z"), "grade" : "C", "score" : 58 }, { "date" : ISODate("2013-02-14T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2012-06-15T00:00:00Z"), "grade" : "C", "score" : 71 } ], "name" : "Live Bait Bar & Restaurant", "restaurant_id" : "40387237" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ab28"), "address" : { "building" : "130", "coord" : [ -73.984758, 40.7457939 ], "street" : "Madison Avenue", "zipcode" : "10016" }, "borough" : "Manhattan", "cuisine" : "Pizza/Italian", "grades" : [ { "date" : ISODate("2014-12-24T00:00:00Z"), "grade" : "Z", "score" : 31 }, { "date" : ISODate("2014-06-17T00:00:00Z"), "grade" : "C", "score" : 98 }, { "date" : ISODate("2013-12-12T00:00:00Z"), "grade" : "C", "score" : 32 }, { "date" : ISODate("2013-05-22T00:00:00Z"), "grade" : "B", "score" : 21 }, { "date" : ISODate("2012-05-02T00:00:00Z"), "grade" : "A", "score" : 11 } ], "name" : "Bella Napoli", "restaurant_id" : "40393488" }
```

- 12) Restaurants that do not prepare cuisine of "American" and grade score more than 70 and located in longitude less than -65.754168

```
> db.restaurants.find({"and":[{"cuisine":{"ne":"American"}}, {"grades.score":{"gt":70}}, {"address.coord":{"lt":-65.754168}}])
```

- 13) Do not prepare cuisine of "American" and grade 'A' and not belong to borough

```
> db.addresses.find({"cuisine":{"$ne:"American"},"grades.grade":"A", "borough":{"$ne:"Brooklyn"}}).sort({"cuisine":-1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aed6"), "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", "restaurant_id" : "40559606" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5af8f"), "address" : { "building" : "8278", "coord" : [ -73.88143509999999, 40.7412552 ], "street" : "Broadway", "zipcode" : "11373" }, "borough" : "Queens", "cuisine" : "Vietnamese/Cambodian/Malaysia", "grades" : [ { "date" : ISODate("2014-06-12T00:00:00Z"), "grade" : "B", "score" : 21 }, { "date" : ISODate("2013-05-20T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2012-12-26T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-12-03T00:00:00Z"), "grade" : "P", "score" : 5 }, { "date" : ISODate("2012-05-04T00:00:00Z"), "grade" : "B", "score" : 27 } ], "name" : "Pho Bac Vietnamese Seafood Cuisine", "restaurant_id" : "40578058" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b38d"), "address" : { "building" : "148", "coord" : [ -74.000254, 40.7172727 ], "street" : "Centre Street", "zipcode" : "10013" }, "borough" : "Manhattan", "cuisine" : "Vietnamese/Cambodian/Malaysia", "grades" : [ { "date" : ISODate("2014-10-01T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2014-05-19T00:00:00Z"), "grade" : "C", "score" : 5 }, { "date" : ISODate("2013-11-15T00:00:00Z"), "grade" : "B", "score" : 14 }, { "date" : ISODate("2013-03-08T00:00:00Z"), "grade" : "B", "score" : 25 }, { "date" : ISODate("2012-05-22T00:00:00Z"), "grade" : "B", "score" : 23 }, { "date" : ISODate("2011-10-27T00:00:00Z"), "grade" : "A", "score" : 9 } ], "name" : "Nha-Trang Centre Vietnam Restaurant", "restaurant_id" : "40751226" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aa78"), "address" : { "building" : "300", "coord" : [ -73.985568, 40.7307496 ], "street" : "East 12 Street", "zipcode" : "10003" }, "borough" : "Manhattan", "cuisine" : "Vegetarian", "grades" : [ { "date" : ISODate("2014-02-05T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2013-04-24T00:00:00Z"), "grade" : "B", "score" : 19 }, { "date" : ISODate("2012-01-17T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2011-07-25T00:00:00Z"), "grade" : "A", "score" : 10 } ], "name" : "Angelica Kitchen", "restaurant_id" : "40388281" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ac2c"), "address" : { "building" : "1307", "coord" : [ -73.9589834, 40.77141839999999 ], "street" : "3 Avenue", "zipcode" : "10021" }, "borough" : "Manhattan", "cuisine" : "Vegetarian", "g
```

- 14) Display restaurant\_id, name, borough and cuisine for restaurants that contain Wil as first three letters of its name

```
> db.addresses.find({"name:/^Wil/},{\"restaurant_id\":1,\"name\":1,\"borough\":1,\"cuisine\":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilken's Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d0"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia", "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b5da"), "borough" : "Bronx", "cuisine" : "Pizza", "name" : "Wilbel Pizza", "restaurant_id" : "40871979" }
>
```

- 15) Display restaurant\_id, name, borough and cuisine for restaurants that contain ces as last three letters of its name

```
> db.addresses.find({"name:/ces$/},{\"restaurant_id\":1,\"name\":1,\"borough\":1,\"cuisine\":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ac59"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Pieces", "restaurant_id" : "40399910" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ad19"), "borough" : "Queens", "cuisine" : "American ", "name" : "S.M.R Restaurant Services", "restaurant_id" : "40403857" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ad1f"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Good Shepherd Services", "restaurant_id" : "40403989" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b1d2"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "The Ice Box-Ralph'S Famous Italian Ices", "restaurant_id" : "40690899" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b3da"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Alices", "restaurant_id" : "40782042" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b5f5"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Re: Sources", "restaurant_id" : "40876068" }
>
```

- 16) Display restaurant\_id, name, borough and cuisine for restaurants that contain Reg as three letters somewhere in its name

```
> db.addresses.find({name: /.Reg./},{restaurant_id:1,"name":1,"borough":1,"cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d4"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a8ca"), "borough" : "Manhattan", "cuisine" : "Café/Coffee/Tea", "name" : "Caffe Reggio", "restaurant_id" : "40369418" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a9db"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Regency Hotel", "restaurant_id" : "40382679" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5acfb"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Regency Whist Club", "restaurant_id" : "40402377" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5adda"), "borough" : "Queens", "cuisine" : "American ", "name" : "Rego Park Cafe", "restaurant_id" : "40523342" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b450"), "borough" : "Queens", "cuisine" : "Pizza", "name" : "Regina Pizza", "restaurant_id" : "40801325" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b664"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Regal Entertainment Group", "restaurant_id" : "40891782" }
```

17) Find rest which belong to borough Bronx and prepare American or Chinese dish.

```
> db.addresses.find({"borough":"Bronx",$or:[{"cuisine":"Chinese"}, {"cuisine":"American"}]})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7eb"), "address" : { "building" : "1236", "coord" : [ -73.8893654, 40.81376179999999 ], "street" : "238 Spofford Ave", "zipcode" : "10474" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2013-12-30T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-01-08T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-06-12T00:00:00Z"), "grade" : "B", "score" : 15 } ], "name" : "Happy Garden", "restaurant_id" : "40363289" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7fc"), "address" : { "building" : "277", "coord" : [ -73.8941893, 40.8634684 ], "street" : "East Kingsbridge Road", "zipcode" : "10458" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2014-03-03T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-09-26T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-03-19T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-08-29T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2011-08-17T00:00:00Z"), "grade" : "A", "score" : 13 } ], "name" : "Happy Garden", "restaurant_id" : "40364296" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ad74"), "address" : { "building" : "2459", "coord" : [ -73.8929629, 40.8601605 ], "street" : "Webster Avenue", "zipcode" : "10458" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2014-12-23T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2014-01-07T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2012-12-28T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("2012-07-18T00:00:00Z"), "grade" : "A", "score" : 13 } ], "name" : "China Wok II", "restaurant_id" : "40510328" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ae00"), "address" : { "building" : "2102", "coord" : [ -73.82609699999999, 40.8687177 ], "street" : "Bartow Ave", "zipcode" : "10475" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2014-08-04T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2014-02-21T00:00:00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate("2013-05-30T00:00:00Z"), "grade" : "B", "score" : 17 }, { "date" : ISODate("2012-04-13T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Dragon City", "restaurant_id" : "40529203" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aeaa"), "address" : { "building" : "3511", "coord" : [ -73.9100876, 40.8860444 ], "street" : "Johnson Avenue", "zipcode" : "10463" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2014-07-02T00:00:00Z"), "grade" : "A", "score" : 5 }, { "date" : ISODate("2013-11-06T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-03-29T00:00:00Z"), "grade" : "B", "score" : 17 }, { "date" : ISODate("2012-06-20T00:00:00Z"), "grade" : "B", "score" : 27 } ], "name" : "Hunan Balcony", "restaurant_id" : "40551996" }
```

18) Find the restaurant\_id,name,borough and cuisine which belong to borough Staten Island or Queens or Bronx or Brooklyn



```
> db.addresses.find({'$or':[{"borough":"Staten Island"}, {"borough":"Queens"}, {"borough":"Bronx or Brooklyn"}]}, {"restaurant_id":1, "name":1, "borough":1, "cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cd"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov Kasher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d6"), "borough" : "Queens", "cuisine" : "American ", "name" : "Brunos On The Boulevard", "restaurant_id" : "40356151" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d7"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7db"), "borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Sal'S Deli", "restaurant_id" : "40361618" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7dd"), "borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Steve Chu'S Deli & Grocery", "restaurant_id" : "40361998" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7e6"), "borough" : "Queens", "cuisine" : "Chinese", "name" : "Ho Mei Restaurant", "restaurant_id" : "40362432" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ee"), "borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Tony'S Deli", "restaurant_id" : "40363333" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7f0"), "borough" : "Staten Island", "cuisine" : "Delicatessen", "name" : "Bagels N Buns", "restaurant_id" : "40363427" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7f1"), "borough" : "Queens", "cuisine" : "Bagels/Pretzels", "name" : "Hot Bagels", "restaurant_id" : "40363565" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7f2"), "borough" : "Queens", "cuisine" : "American ", "name" : "Snack Time Grill", "restaurant_id" : "40363590" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7f8"), "borough" : "Staten Island", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40363834" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7fa"), "borough" : "Queens", "cuisine" : "American ", "name" : "Terminal Cafe/Yankee Clipper", "restaurant_id" : "40364262" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7fb"), "borough" : "Staten Island", "cuisine" : "Delicatessen", "name" : "Plaza Bagels & Deli", "restaurant_id" : "40364286" }
```

19) Find the restaurant\_id, name, borough and cuisine which are not belonging to borough Staten Island or Queens or Bronx or Brooklyn

```
> db.addresses.find({'$or':[{"borough":"Staten Island"}, {"borough":{"$ne":"Queens"}}, {"borough":{"$ne":"Bronx or Brooklyn"}]}], {"restaurant_id":1, "name":1, "borough":1, "cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ca"), "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cc"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cd"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov Kasher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d0"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia", "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d1"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d2"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "1 East 66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d3"), "borough" : "Brooklyn", "cuisine" : "Chinese", "name" : "May May Kitchen", "restaurant_id" : "40358429" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d4"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d5"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d6"), "borough" : "Queens", "cuisine" : "American ", "name" : "Brunos On The Boulevard", "restaurant_id" : "40356151" }
```

20) Find the restaurant\_id, borough and cuisine for res which achieved score which is not more than 10

```
> db.addresses.find({"grades.score":{$lt:10}},{ "restaurant_id":1,"name":1,"borough":1,"cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera
Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ca"), "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'
S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" :
"Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cc"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynold
s Pub And Restaurant", "restaurant_id" : "30191841" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilk
en'S Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park B
ake Shop", "restaurant_id" : "30075445" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d0"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia"
, "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d1"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ic
es", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d2"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "1 East
66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d3"), "borough" : "Brooklyn", "cuisine" : "Chinese", "name" : "May May K
itchen", "restaurant_id" : "40358429" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d4"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina
Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d5"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seu
da Foods", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d6"), "borough" : "Queens", "cuisine" : "American ", "name" : "Brunos On
The Boulevard", "restaurant_id" : "40356151" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d7"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices
", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
```

- 21) Find the restaurant\_id, borough and cuisine for res which prepared dish except 'American' and 'chinese' or its name begins with 'wil'

```
> db.addresses.find({'$or':[{'name:/^Wil/},{ "$and":[{"cuisine":{"$ne:"American"}},{ "cuisine":{"$ne:"Chinese"}}]}]},{ "re
saurant_id":1,"name":1,"borough":1,"cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera
Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ca"), "borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'
S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" :
"Kosher Island", "restaurant_id" : "40356442" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cc"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynold
s Pub And Restaurant", "restaurant_id" : "30191841" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cd"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov K
osher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilk
en'S Fine Food", "restaurant_id" : "40356483" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park B
ake Shop", "restaurant_id" : "30075445" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d0"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia"
, "restaurant_id" : "40357217" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d1"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ic
es", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d2"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "1 East
66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d4"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina
Caterers", "restaurant_id" : "40356649" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d5"), "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seu
da Foods", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d6"), "borough" : "Queens", "cuisine" : "American ", "name" : "Brunos On
The Boulevard", "restaurant_id" : "40356151" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d7"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices
", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
```

- 22) Find the res\_id, name, and grades for res which achieved grade 'A' and scored 11 on date:"2014-08-11T00:00:00Z"

```
> db.addresses.find({"grades.grade":"A","grades.score":11,"grades.date":ISODate("2014-08-11T00:00:00Z")},{
"restaurant_id":1,"name":1,"grades":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a847"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 13 }, { "date" : ISODate("2013-07-22T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate
("2013-03-14T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2012-07-02T00:00:00Z"), "grade" : "A",
"score" : 11 }, { "date" : ISODate("2012-02-02T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2
011-08-24T00:00:00Z"), "grade" : "A", "score" : 11 } ], "name" : "Neary'S Pub", "restaurant_id" : "40365871" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a922"), "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("20
11-09-13T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Don Filippo Restaurant", "restaurant_id" : "40372
417" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ac07"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 6 }, { "date" : ISODate("2013-08-29T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate
("2013-04-25T00:00:00Z"), "grade" : "C", "score" : 2 }, { "date" : ISODate("2012-10-23T00:00:00Z"), "grade" : "A",
"score" : 13 }, { "date" : ISODate("2012-04-16T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("20
11-11-15T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Mustang Sally'S Restaurant", "restaurant_id" : "4
0397374" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5adf4"), "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 Maca
nudo (Cigar Bar)", "restaurant_id" : "40526406" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aeea"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 8 }, { "date" : ISODate("2014-01-09T00:00:00Z"), "grade" : "B", "score" : 27 }, { "date" : ISODate
("2013-06-11T00:00:00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate("2012-10-09T00:00:00Z"), "grade" : "B",
"score" : 19 }, { "date" : ISODate("2012-05-10T00:00:00Z"), "grade" : "A", "score" : 11 }, { "date" : ISODate("20
11-11-23T00:00:00Z"), "grade" : "A", "score" : 9 } ], "name" : "Marino'S Pizza & Restaurant", "restaurant_id" : "4
0560917" }
```

- 23) Find the res\_id, name, and grades for res which achieved 2<sup>nd</sup> element of grade 'A' and scored 9 on date:"2014-08-11T00:00:00Z"

```
> db.addresses.find({"grades.grade":"A","grades.score":9,"grades.date":ISODate("2014-08-11T00:00:00Z")},{
"restaurant_id":1,"name":1,"grades":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a81a"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 10 }, { "date" : ISODate("2014-03-14T00:00:00Z"), "grade" : "A", "score" : 3 }, { "date" : ISODate
("2013-01-16T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-07-12T00:00:00Z"), "grade" : "A",
"score" : 9 } ], "name" : "Serendipity 3", "restaurant_id" : "40364863" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a847"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 13 }, { "date" : ISODate("2013-07-22T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate
("2013-03-14T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2012-07-02T00:00:00Z"), "grade" : "A",
"score" : 11 }, { "date" : ISODate("2012-02-02T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2
011-08-24T00:00:00Z"), "grade" : "A", "score" : 11 } ], "name" : "Neary'S Pub", "restaurant_id" : "40365871" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a922"), "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("20
11-09-13T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Don Filippo Restaurant", "restaurant_id" : "40372
417" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a9cc"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 12 }, { "date" : ISODate("2014-02-18T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate
("2013-06-25T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2012-05-23T00:00:00Z"), "grade" : "A",
"score" : 12 }, { "date" : ISODate("2011-12-27T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2
011-08-30T00:00:00Z"), "grade" : "A", "score" : 9 } ], "name" : "Pietros", "restaurant_id" : "40381595" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5aa84"), "grades" : [ { "date" : ISODate("2014-08-11T00:00:00Z"), "grade" :
"A", "score" : 3 }, { "date" : ISODate("2013-08-16T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate
("2012-08-20T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2012-04-04T00:00:00Z"), "grade" : "A",
"score" : 2 }, { "date" : ISODate("2011-11-15T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "The Cornell
```

- 24) Find the res\_id, name, address and geo location where 2<sup>nd</sup> element of coord array has value more than 42 and upto 52

```

> db.addresses.find({"address.coord.1":{"$gt:42,$lte:52}},{"restaurant_id":1,"name":1,"address":1}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5aa6a"),
  "address" : {
    "building" : "47",
    "coord" : [
      -78.877224,
      42.89546199999999
    ],
    "street" : "Broadway @ Trinity Pl",
    "zipcode" : "10006"
  },
  "name" : "T.G.I. Friday'S",
  "restaurant_id" : "40387990"
},
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5aa95"),
  "address" : {
    "building" : "1",
    "coord" : [
      -0.7119979,
      51.6514664
    ],
    "street" : "Pennplaza E, Penn Sta",
    "zipcode" : "10001"
  },
  "name" : "T.G.I. Fridays",
  "restaurant_id" : "40388936"
}

```

25) To arrange the name of restaurants in ascending order along with all columns

```

> db.addresses.find().sort({"name":1}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5b458"),
  "address" : {
    "building" : "129",
    "coord" : [
      -73.962943,
      40.685007
    ],
    "street" : "Gates Avenue",
    "zipcode" : "11238"
  },
  "borough" : "Brooklyn",
  "cuisine" : "Italian",
  "grades" : [
    {
      "date" : ISODate("2014-03-06T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    },
    {
      "date" : ISODate("2013-08-29T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2013-03-08T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    }
  ]
}

```

26) To arrange the name of restaurants in descending order along with all columns

```
> db.addresses.find().sort({"name":-1}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5a884"),
  "address" : {
    "building" : "6946",
    "coord" : [
      -73.8811834,
      40.7017759
    ],
    "street" : "Myrtle Avenue",
    "zipcode" : "11385"
  },
  "borough" : "Queens",
  "cuisine" : "German",
  "grades" : [
    {
      "date" : ISODate("2014-09-24T00:00:00Z"),
      "grade" : "A",
      "score" : 11
    },
    {
      "date" : ISODate("2014-04-17T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2013-03-12T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
}
```

27) To arrange the name of cuisine in ascending order and for that borough should be desc



```

db.addresses.find().sort({"cuisine":1,"borough":-1}).pretty()

  "_id" : ObjectId("6108c408c7dbac3cf2a5aeb5"),
  "address" : {
    "building" : "1345",
    "coord" : [
      -73.959249,
      40.768076
    ],
    "street" : "2 Avenue",
    "zipcode" : "10021"
  },
  "borough" : "Manhattan",
  "cuisine" : "Afghan",
  "grades" : [
    {
      "date" : ISODate("2014-10-07T00:00:00Z")
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2013-10-23T00:00:00Z")
      "grade" : "A",
      "score" : 8
    },
    {
      "date" : ISODate("2012-10-26T00:00:00Z")
      "grade" : "A",
      "score" : 13
    },
  ],

```

28) To know whether all the addresses contains the street or not.

```

> db.addresses.find({"address.street":{"$exists:true}}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"),
  "address" : {
    "building" : "2780",
    "coord" : [
      -73.982419999999999,
      40.579505
    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
  },
  "borough" : "Brooklyn",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-06-10T00:00:00Z"),
      "grade" : "A",
      "score" : 5
    },
    {
      "date" : ISODate("2013-06-05T00:00:00Z"),
      "grade" : "A",
      "score" : 7
    },
    {
      "date" : ISODate("2012-04-13T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2011-10-12T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    }
  ],
}

```

29) Query which will select all documents in the res collection where the coord field value is double

```

> db.addresses.find({"address.coord":{"$type": 1}})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "address" : { "building" : "2780", "coord" : [ -73.98241999999999, 40.579505 ], "street" : "Stillwell Avenue", "zipcode" : "11224" }, "borough" : "Brooklyn", "cuisine" : "American", "grades" : [ { "date" : ISODate("2014-06-10T00:00:00Z"), "grade" : "A", "score" : 5 }, { "date" : ISODate("2013-06-05T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2012-04-13T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2011-10-12T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ca"), "address" : { "building" : "469", "coord" : [ -73.961704, 40.662942 ], "street" : "Flatbush Avenue", "zipcode" : "11225" }, "borough" : "Brooklyn", "cuisine" : "Hamburgers", "grades" : [ { "date" : ISODate("2014-12-30T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2014-07-01T00:00:00Z"), "grade" : "B", "score" : 23 }, { "date" : ISODate("2013-04-30T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2012-05-08T00:00:00Z"), "grade" : "A", "score" : 12 } ], "name" : "Wendy'S", "restaurant_id" : "30112340" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cb"), "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" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cc"), "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("6108c408c7dbac3cf2a5a7cd"), "address" : { "building" : "97-22", "coord" : [ -73.8601152, 40.7311739 ], "street" : "63 Road", "zipcode" : "11374" }, "borough" : "Queens", "cuisine" : "Jewish/Kosher", "grades" : [ { "date" : ISODate("2014-11-24T00:00:00Z"), "grade" : "Z", "score" : 20 }, { "date" : ISODate("2013-01-17T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2012-08-02T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2011-12-15T00:00:00Z"), "grade" : "B", "score" : 25 } ], "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356068" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7ce"), "address" : { "building" : "7114", "coord" : [ -73.9068506, 40.6199034 ], "street" : "Avenue U", "zipcode" : "11234" }, "borough" : "Brooklyn", "cuisine" : "Delicatessen", "grades" : [ { "date" : ISODate("2014-05-29T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2014-01-14T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2013-08-03T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2012-07-18T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-03-09T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate("2011-10-14T00:00:00Z"), "grade" : "A", "score" : 9 } ], "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }

```

30) Query which will select the rest\_id, name and grades for those res which returns 0 as a reminder after dividing the score by 7

```

> db.addresses.find({"grades.score":{$mod:[7,0]}},{ "restaurant_id":1,"name":1,"grades":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7c9"), "grades" : [ { "date" : ISODate("2014-06-10T00:00:00Z"), "grade" :
"A", "score" : 5 }, { "date" : ISODate("2013-06-05T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate(
"2012-04-13T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate("2011-10-12T00:00:00Z"), "grade" : "A",
"score" : 12 } ], "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7cf"), "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("6108c408c7dbac3cf2a5a7d2"), "grades" : [ { "date" : ISODate("2014-05-07T00:00:00Z"), "grade" :
"A", "score" : 3 }, { "date" : ISODate("2013-05-03T00:00:00Z"), "grade" : "A", "score" : 4 }, { "date" : ISODate(
"2012-04-30T00:00:00Z"), "grade" : "A", "score" : 6 }, { "date" : ISODate("2011-12-27T00:00:00Z"), "grade" : "A",
"score" : 0 } ], "name" : "1 East 66Th Street Kitchen", "restaurant_id" : "40359480" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d3"), "grades" : [ { "date" : ISODate("2014-09-16T00:00:00Z"), "grade" :
"B", "score" : 21 }, { "date" : ISODate("2013-08-28T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate(
"2013-04-02T00:00:00Z"), "grade" : "C", "score" : 56 }, { "date" : ISODate("2012-08-15T00:00:00Z"), "grade" : "B",
"score" : 27 }, { "date" : ISODate("2012-03-28T00:00:00Z"), "grade" : "B", "score" : 27 } ], "name" : "May May K
itchen", "restaurant_id" : "40358429" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d5"), "grades" : [ { "date" : ISODate("2014-11-10T00:00:00Z"), "grade" :
"A", "score" : 11 }, { "date" : ISODate("2013-10-10T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate(
"2012-10-04T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2012-05-21T00:00:00Z"), "grade" : "A",
"score" : 9 }, { "date" : ISODate("2011-12-30T00:00:00Z"), "grade" : "B", "score" : 19 } ], "name" : "Seuda Food
s", "restaurant_id" : "40360045" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7d6"), "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("6108c408c7dbac3cf2a5a7db"), "grades" : [ { "date" : ISODate("2014-08-16T00:00:00Z"), "grade" :
"A", "score" : 12 }, { "date" : ISODate("2013-08-27T00:00:00Z"), "grade" : "A", "score" : 9 }, { "date" : ISODate(
"2012-09-20T00:00:00Z"), "grade" : "A", "score" : 7 }, { "date" : ISODate("2011-09-29T00:00:00Z"), "grade" : "A",
"score" : 10 } ], "name" : "Sal'S Deli", "restaurant_id" : "40361618" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7dd"), "grades" : [ { "date" : ISODate("2014-03-19T00:00:00Z"), "grade" :
"A", "score" : 3 }, { "date" : ISODate("2013-03-13T00:00:00Z"), "grade" : "A", "score" : 12 }, { "date" : ISODate(
"2012-03-27T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2011-04-05T00:00:00Z"), "grade" : "A",
"score" : 7 } ], "name" : "Steve Chu'S Deli & Grocery", "restaurant_id" : "40361998" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a7de"), "grades" : [ { "date" : ISODate("2014-09-15T00:00:00Z"), "grade" :
"A", "score" : 10 }, { "date" : ISODate("2014-03-04T00:00:00Z"), "grade" : "A", "score" : 13 }, { "date" : ISODate(

```

31) Find the res name,borough,longitude and latitude and cuisine for res which contain 'mon' as 3 letters somewhere in name

```
> db.addresses.find({name:{$regex:"mon.*"}},{ "name":1,"borough":1,"address.coord":1,"cuisine":1})
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a861"), "address" : { "coord" : [ -73.98306099999999, 40.7441419 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Desmond'S Tavern" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a865"), "address" : { "coord" : [ -73.8221418, 40.7272376 ] }, "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Shimons Kosher Pizza" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a872"), "address" : { "coord" : [ -74.10465599999999, 40.58834 ] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a89b"), "address" : { "coord" : [ -73.9812843, 40.5947365 ] }, "borough" : "Brooklyn", "cuisine" : "Pizza/Italian", "name" : "Lb Spumoni Gardens" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a8ed"), "address" : { "coord" : [ -73.951199, 40.7166026 ] }, "borough" : "Brooklyn", "cuisine" : "Italian", "name" : "Bamonte'S Restaurant" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a926"), "address" : { "coord" : [ -73.924072, 40.76108900000001 ] }, "borough" : "Queens", "cuisine" : "Greek", "name" : "Omonia Cafe" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5a9a9"), "address" : { "coord" : [ -73.9901605, 40.7526176 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Delmonico'S Kitchen" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ab4b"), "address" : { "coord" : [ -73.9707505, 40.7635651 ] }, "borough" : "Manhattan", "cuisine" : "Delicatessen", "name" : "Delmonico Gourmet" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5abb9"), "address" : { "coord" : [ -73.9760637, 40.7508686 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Delmonico Gourmet" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ad0c"), "address" : { "coord" : [ -73.97198209999999, 40.764464 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Harmonie Club" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5adcf"), "address" : { "coord" : [ -73.79571990000001, 40.7095637 ] }, "borough" : "Queens", "cuisine" : "Bakery", "name" : "Ramona'S Bakery" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ae2b"), "address" : { "coord" : [ -73.98463480000001, 40.7630755 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Neil Simon Theatre" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5ae8d"), "address" : { "coord" : [ -74.028486, 40.630438 ] }, "borough" : "Brooklyn", "cuisine" : "Mediterranean", "name" : "Omonia Cafe" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b042"), "address" : { "coord" : [ -73.9849976, 40.7276766 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Simone Bar Cafe" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b273"), "address" : { "coord" : [ -74.01032339999999, 40.7050156 ] }, "borough" : "Manhattan", "cuisine" : "Italian", "name" : "Delmonicos" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b3e7"), "address" : { "coord" : [ -73.8706606, 40.7342757 ] }, "borough" : "Queens", "cuisine" : "American ", "name" : "Cinnabon World Famous Cinnamon Rolls" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b40b"), "address" : { "coord" : [ -73.9640299, 40.807001 ] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Ferris Booth Commons - Alfred Lerner Hall" }
{ "_id" : ObjectId("6108c408c7dbac3cf2a5b464"), "address" : { "coord" : [ -74.10465599999999, 40.58834 ] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club - Pool Snack Bar" }
```

32) Find the res name,borough,longitude and latitude and cuisine for res which contain 'mad' as first 3 letters in name

```
> db.addresses.find({name:/^Mad/},{ "name":1,"borough":1,"address.coord":1,"cuisine":1}).pretty()
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5ad05"),
  "address" : {
    "coord" : [
      -73.9860597,
      40.7431194
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "American ",
  "name" : "Madison Square"
}
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5add0"),
  "address" : {
    "coord" : [
      -73.98302199999999,
      40.742313
    ]
  },
  "borough" : "Manhattan",
  "cuisine" : "Indian",
  "name" : "Madras Mahal"
}
{
  "_id" : ObjectId("6108c408c7dbac3cf2a5b0be"),
  "address" : {
    "coord" : [
      -74.000002,
      40.72735
    ]
  },
}
```