

==>Write a MongoDB query to display the fields restaurant_id, name, borough and cuisine, but exclude the field _id for all the documents in the collection restaurant >
db.restaurants.find({}, {_id : false}).pretty()

```
rails@rails-System: ~
> db.restaurants.find({}, {_id : false}).pretty()
{
  "address": {
    "building": "213-29",
    "coord": [
      -73.7765052,
      40.77898039999999
    ],
    "street": "26 Avenue",
    "zipcode": "11360"
  },
  "borough": "Queens",
  "cuisine": "American ",
  "grades": [
    {
      "date": ISODate("2014-12-02T00:00:00Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2013-12-14T00:00:00Z"),
      "grade": "A",
      "score": 8
    },
    {
      "date": ISODate("2012-11-13T00:00:00Z"),
      "grade": "A",
      "score": 8
    }
  ],
  "name": "Applebee's Neighborhood Grill & Bar",
  "restaurant_id": "40815640"
},
{
  "address": {
    "building": "1018",
    "coord": [
      -73.9642863,
      40.802973
    ],
    "street": "Amsterdam Avenue",
    "zipcode": "10025"
  },
  "borough": "Manhattan",
  "cuisine": "American ",
  "grades": [
    {
      "date": ISODate("2014-04-17T00:00:00Z"),
      "grade": "A",
      "score": 12
    }
  ],
  "name": "Madison's",
  "restaurant_id": "40823884"
},
{
  "id": ObjectId("5947bc1fb60c37c179376938"),
  "address": {
    "building": "5686",
    "coord": [
      -73.9040753,
      40.9069011
    ],
    "street": "Riverdale Avenue",
    "zipcode": "10471"
  },
  "borough": "Bronx",
  "cuisine": "Italian",
  "grades": [
    {
      "date": ISODate("2014-04-30T00:00:00Z"),
      "grade": "A",
      "score": 10
    },
    {
      "date": ISODate("2013-11-20T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-05-04T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2012-10-16T00:00:00Z"),
      "grade": "A",
      "score": 8
    },
    {
      "date": ISODate("2011-10-12T00:00:00Z"),
      "grade": "A",
      "score": 10
    }
  ],
  "name": "Madison's",
  "restaurant_id": "40823884"
},
{
  "id": ObjectId("5947bc1fb60c37c1793769a7"),
  "address": {
    "building": "3048",
    "coord": [
      -73.8308192,
      40.84734539999999
    ],
    "street": "Amsterdam Avenue",
    "zipcode": "10025"
  },
  "borough": "Manhattan",
  "cuisine": "American ",
  "grades": [
    {
      "date": ISODate("2014-04-17T00:00:00Z"),
      "grade": "A",
      "score": 12
    }
  ],
  "name": "Madison's",
  "restaurant_id": "40823884"
}
```

==>Write a MongoDB query to display all the restaurant which is in the borough Bronx
> db.restaurants.find({borough : 'Bronx'}).pretty()

```
rails@rails-System: ~
> db.restaurants.find({borough : 'Bronx'}).pretty()
{
  "id": ObjectId("5947bc1fb60c37c179376938"),
  "address": {
    "building": "5686",
    "coord": [
      -73.9040753,
      40.9069011
    ],
    "street": "Riverdale Avenue",
    "zipcode": "10471"
  },
  "borough": "Bronx",
  "cuisine": "Italian",
  "grades": [
    {
      "date": ISODate("2014-04-30T00:00:00Z"),
      "grade": "A",
      "score": 10
    },
    {
      "date": ISODate("2013-11-20T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-05-04T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2012-10-16T00:00:00Z"),
      "grade": "A",
      "score": 8
    },
    {
      "date": ISODate("2011-10-12T00:00:00Z"),
      "grade": "A",
      "score": 10
    }
  ],
  "name": "Madison's",
  "restaurant_id": "40823884"
},
{
  "id": ObjectId("5947bc1fb60c37c1793769a7"),
  "address": {
    "building": "3048",
    "coord": [
      -73.8308192,
      40.84734539999999
    ],
    "street": "Amsterdam Avenue",
    "zipcode": "10025"
  },
  "borough": "Manhattan",
  "cuisine": "American ",
  "grades": [
    {
      "date": ISODate("2014-04-17T00:00:00Z"),
      "grade": "A",
      "score": 12
    }
  ],
  "name": "Madison's",
  "restaurant_id": "40823884"
}
```

==>Write a MongoDB query to find the restaurants who achieved a score more than 90

> db.restaurants.find({'grades.score' : {\$gt : 90}}).pretty()

```
rails@rails-System: ~
> db.restaurants.find({'grades.score' : {$gt : 90}}).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179375d9d"),
  "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("5947bc1fb60c37c179375e3e"),
```

==>Write a MongoDB query to display the first 5 restaurant which is in the borough Bronx

> db.restaurants.find({'borough' : 'Bronx'}).limit(5).pretty()

```
rails@rails-System: ~
> db.restaurants.find({'borough' : 'Bronx'}).limit(5).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179376938"),
  "address" : {
    "building" : "5686",
    "coord" : [
      -73.9040753,
      40.9069011
    ],
    "street" : "Riverdale Avenue",
    "zipcode" : "10471"
  },
  "borough" : "Bronx",
  "cuisine" : "Italian",
  "grades" : [
    {
      "date" : ISODate("2014-04-30T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2013-11-20T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2013-05-04T00:00:00Z"),
      "grade" : "A",
      "score" : 9
    },
    {
      "date" : ISODate("2012-10-16T00:00:00Z"),
      "grade" : "A",
      "score" : 8
    },
    {
      "date" : ISODate("2011-10-12T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    }
  ],
  "name" : "Madison'S",
  "restaurant_id" : "40823884"
}
{
  "_id" : ObjectId("5947bc1fb60c37c1793769a7"),
  "address" : {
    "building" : "3048",
    "coord" : [
      -73.8308192,
      40.847345399999999
    ],
```

==>Write a MongoDB query to display the next 5 restaurants after skipping first 5 which are in the borough Bronx

```
> db.restaurants.find({borough : 'Bronx'}).limit(5).skip(5).pretty()
```

```
rails@rails-System: ~
> db.restaurants.find({borough : 'Bronx'}).limit(5).skip(5).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c1793769fd"),
  "address" : {
    "building" : "308",
    "coord" : [
      -73.90407979999999,
      40.8464484
    ],
    "street" : "East 175 Street",
    "zipcode" : "10457"
  },
  "borough" : "Bronx",
  "cuisine" : "American ",
  "grades" : [
    {
      "date" : ISODate("2014-09-15T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    },
    {
      "date" : ISODate("2013-10-09T00:00:00Z"),
      "grade" : "A",
      "score" : 12
    },
    {
      "date" : ISODate("2013-05-28T00:00:00Z"),
      "grade" : "B",
      "score" : 20
    },
    {
      "date" : ISODate("2012-05-18T00:00:00Z"),
      "grade" : "A",
      "score" : 2
    },
    {
      "date" : ISODate("2012-01-05T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    }
  ],
  "name" : "Casa Promesa",
  "restaurant_id" : "40861141"
},
{
  "_id" : ObjectId("5947bc1fb60c37c179376a06"),
  "address" : {
    "building" : "3422",
    "coord" : [
      -73.8826735,
      40.881086
    ]
  }
}
```

==>Write a MongoDB query to find the restaurants that achieved a score, more than 80 but less than 100

```
> db.restaurants.find({'grades' : {$elemMatch:{'score': {$gt : 80 , $lt : 100}}}}).pretty()
```

```
rails@rails-System: ~
> db.restaurants.find({'grades' : {$elemMatch:{'score': {$gt : 80 , $lt : 100}}}}).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179375e3e"),
  "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
    }
  ],
}
```

==>Write a MongoDB query to find the restaurants which locate in latitude value less than -95.754168

> db.restaurants.find({'address.coord.0' : {\$lt : -95.754168}}).pretty()

```
rails@rails-System: ~
> db.restaurants.find({'address.coord.0' : {$lt : -95.754168}}).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179376a9b"),
  "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"
},
{
  "_id" : ObjectId("5947bc1fb60c37c179376288"),
  "address" : {
    "building" : "3707",
    "coord" : [
      -101.8945214,
      33.5197474
    ],
    "street" : "82 Street",
    "zipcode" : "11372"
  },
  "borough" : "Queens",
}
```

==>Write a MongoDB query to find the restaurants that do not prepare any cuisine of 'American' and their grade score more than 70 and latitude less than -65.754168

db.restaurants.find({'\$and': [{'grades.score': {\$gt : 70}}, {'address.coord.0' : {\$lt : -65.754168}}, {'cuisine' : {\$ne : 'American '}}]}).pretty()

```
rails@rails-System: ~
> db.restaurants.find({'$and': [{'grades.score': {$gt : 70}}, {'address.coord.0' : {$lt : -65.754168}}, {'cuisine' : {$ne : 'American '}}]}).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179375e3e"),
  "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
    }
  ],
}
```

==>Write a MongoDB query to update the restaurant's grade to 'B' whose score is more than or equal to 10(update only the first grade).

> db.restaurants.update({'grades.0.score' : {\$gte : 10}},{\$set :{'grades.0.grade' : 'B'}},{multi:true})

```
rails@rails-System: ~
{
  "score" : 11
}
{
  "_id" : ObjectId("5947bc1fb60c37c179376652"),
  "grades" : [
    {
      "score" : 48
    },
    {
      "score" : 12
    },
    {
      "score" : 27
    },
    {
      "score" : 10
    },
    {
      "score" : 12
    },
    {
      "score" : 13
    }
  ]
}
{
  "_id" : ObjectId("5947bc1fb60c37c179376671"),
  "grades" : [
    {
      "score" : 53
    },
    {
      "score" : 12
    },
    {
      "score" : 0
    },
    {
      "score" : 12
    },
    {
      "score" : 11
    }
  ]
}
> db.restaurants.update({'grades.0.score' : {$gte : 10}},{$set :{'grades.0.grade' : 'B'}},{multi:true})
WriteResult({ "nMatched" : 2251, "nUpserted" : 0, "nModified" : 1999 })
>
```

==>Write a MongoDB query to delete the restaurants in borough Bronx.

>db.restaurants.remove({'borough' : 'Bronx'})

```
rails@rails-System: ~
{
  "date" : ISODate("2012-05-02T00:00:00Z"),
  "grade" : "A",
  "score" : 11
},
{
  "name" : "Bella Napoli",
  "restaurant_id" : "40393488"
}
{
  "_id" : ObjectId("5947bc1fb60c37c179376810"),
  "address" : {
    "building" : "",
    "coord" : [
      -74.0163793,
      40.7167671
    ],
    "street" : "Hudson River",
    "zipcode" : "10282"
  },
  "borough" : "Manhattan",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-06-27T00:00:00Z"),
      "grade" : "B",
      "score" : 89
    },
    {
      "date" : ISODate("2013-06-06T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2012-06-19T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "West 79th Street Boat Basin Cafe",
  "restaurant_id" : "40756344"
}
> db.restaurants.remove({'borough' : 'Bronx'})
WriteResult({ "nRemoved" : 309 })
> db.restaurants.find({'borough' : 'Bronx'}).pretty()
{
  "_id" : ObjectId("5947bc1fb60c37c179376810"),
  "address" : {
    "building" : "",
    "coord" : [
      -74.0163793,
      40.7167671
    ],
    "street" : "Hudson River",
    "zipcode" : "10282"
  },
  "borough" : "Manhattan",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-06-27T00:00:00Z"),
      "grade" : "B",
      "score" : 89
    },
    {
      "date" : ISODate("2013-06-06T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2012-06-19T00:00:00Z"),
      "grade" : "A",
      "score" : 13
    }
  ],
  "name" : "West 79th Street Boat Basin Cafe",
  "restaurant_id" : "40756344"
}
```