mongoDB
Assignment-3

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({},{restaurant_id:1,name:1,borough:1,cuisine:1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    borough: 'Bronx',
    cuisine: 'Bakery',
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cc"),
    borough: 'Brooklyn',
    cuisine: 'Hamburgers',
    name: "Wendy'S",
    restaurant_id: '30112340'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cd"),
    borough: 'Manhattan',
    cuisine: 'Irish',
    name: 'Dj Reynolds Pub And Restaurant',
    restaurant_id: '30191841'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4ce"),
    borough: 'Brooklyn',
    cuisine: 'American ',
    name: 'Riviera Caterer',
    restaurant_id: '40356018'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cf"),
    borough: 'Queens',
    cuisine: 'Jewish/Kosher',
    name: 'Tov Kosher Kitchen',
    restaurant_id: '40356068'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d0"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'Brunos On The Boulevard',
    restaurant_id: '40356151'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d1"),
    borough: 'Staten Island',
    cuisine: 'Jewish/Kosher',
    name: 'Kosher Island',
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({},{restaurant_id:1,name:1,borough:1,cuisine:1,_id:0})
[
  {
    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'
  },
  {
    borough: 'Brooklyn',
    cuisine: 'Delicatessen',
    name: "Wilken'S Fine Food",
    restaurant_id: '40356483'
  },
```

```
2 |

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.aggregate({$group:{_id:{borough:'$Bronx'}}})
[ { _id: { borough: null } } ]
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.aggregate({$group:{_id:{name:'$name',borough:'$Bronx'}}})
[
  { _id: { name: 'El Azteca Mexican Restaurant' } },
  { _id: { name: 'Wcou Radio / Tile Bar' } },
  { _id: { name: 'Banshee Pub' } },
  { _id: { name: 'Haru Sake Bar' } },
  { _id: { name: 'Cravath Cafe' } },
  { _id: { name: 'Ciros Pastry Shop' } },
  { _id: { name: 'El Nuevo Amanecer Restaurant' } },
  { _id: { name: 'Caprice' } },
  { _id: { name: 'Footprints Cafe' } },
  { _id: { name: 'Va Bene' } },
  { _id: { name: 'Moustache Restaurant' } },
  { _id: { name: "Gray'S Papaya" } },
  { _id: { name: 'Hunan Balcony' } },
  { _id: { name: 'Estihaya Asian Restaurant' } },
  { _id: { name: "Chic-Fil-A, Quiznos Subs, Jw'S, Tossed" } },
  { _id: { name: "Luigi'S Pizza & Restaurant" } },
  { _id: { name: 'Sushi Family' } },
  { _id: { name: 'Pita Pan Cafe' } },
  { _id: { name: "Ciro'S Pizza Restaurant" } },
  { _id: { name: "Sal'S Deli" } }
]
Type "it" for more
Atlas atlas-m6gq77-shard-0 [primary] restaurants>
```

```
Type "it" for more
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.aggregate({$limit:5})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    address: {
      building: '1007',
      coord: [ -73.856077, 40.848447 ],
      street: 'Morris Park Ave',
      zipcode: '10462'
    },
    borough: 'Bronx',
    cuisine: 'Bakery',
    grades: [
      {
        date: ISODate("2014-03-03T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2013-09-11T00:00:00.000Z"),
        grade: 'A',
        score: 6
      },
      {
        date: ISODate("2013-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2011-11-23T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2011-03-10T00:00:00.000Z"),
        grade: 'B',
        score: 14
      }
    ],
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cc"),
    address: {
      building: '469',
      coord: [ -73.961704, 40.662942 ],
      street: 'Flatbush Avenue',
      zipcode: '11225'
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.aggregate([{$limit:10},{$skip:5}])
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d0"),
    address: {
      building: '8825',
      coord: [ -73.8803827, 40.7643124 ],
      street: 'Astoria Boulevard',
      zipcode: '11369'
    },
    borough: 'Queens',
    cuisine: 'American ',
    grades: [
      {
        date: ISODate("2014-11-15T00:00:00.000Z"),
        grade: 'Z',
        score: 38
      },
      {
        date: ISODate("2014-05-02T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2013-03-02T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2012-02-10T00:00:00.000Z"),
        grade: 'A',
        score: 13
      }
    ],
    name: 'Brunos On The Boulevard',
    restaurant_id: '40356151'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d1"),
    address: {
      building: '2206',
      coord: [ -74.1377286, 40.6119572 ],
      street: 'Victory Boulevard',
      zipcode: '10314'
    },
    borough: 'Staten Island',
    cuisine: 'Jewish/Kosher',
    grades: [
      {
        date: ISODate("2014-10-06T00:00:00.000Z"),
```

```
Uncaught:
SyntaxError: Unexpected token, expected "," (1:43)

> 1 | db.addresses.find({grades:{score:{$gt:90}}})
    |                                           ^
  2 |

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.restaurants.find({grades:{score:{$gt:90}}})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({grades:{score:{$gt:90}}})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({score:{$gt:90}})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.restaurants.find({grades:{$elemMatch:{score:{$gt:90}}}})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({grades:{$elemMatch:{score:{$gt:90}}}})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d629"),
    address: {
      building: '65',
      coord: [ -73.9782725, 40.7624022 ],
      street: 'West   54 Street',
      zipcode: '10019'
    },
    borough: 'Manhattan',
    cuisine: 'American ',
    grades: [
      {
        date: ISODate("2014-08-22T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2014-03-28T00:00:00.000Z"),
        grade: 'C',
        score: 131
      },
      {
        date: ISODate("2013-09-25T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2013-04-08T00:00:00.000Z"),
        grade: 'B',
        score: 25
      },
      {
        date: ISODate("2012-10-15T00:00:00.000Z"),
```

Type here to search

```
mongosh mongodb+srv://population.vd9k6.mongodb.net/population

switched to db restaurants
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({grades:{$elemMatch:{score:{$gt:80,$lt:100}}}})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d6ca"),
    address: {
      building: '345',
      coord: [ -73.9864626, 40.7266739 ],
      street: 'East 6 Street',
      zipcode: '10003'
    },
    borough: 'Manhattan',
    cuisine: 'Indian',
    grades: [
      {
        date: ISODate("2014-09-15T00:00:00.000Z"),
        grade: 'A',
        score: 5
      },
      {
        date: ISODate("2014-01-14T00:00:00.000Z"),
        grade: 'A',
        score: 8
      },
      {
        date: ISODate("2013-05-30T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-04-24T00:00:00.000Z"),
        grade: 'P',
        score: 2
      },
      {
        date: ISODate("2012-10-01T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2012-04-06T00:00:00.000Z"),
        grade: 'C',
        score: 92
      },
      {
        date: ISODate("2011-11-03T00:00:00.000Z"),
        grade: 'C',
        score: 41
      }
    ],
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({address:{$elemMatch:{coord:{$lt:-96}}}})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.coord":{$lt:-95.754168}})
[
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27db13"),
    address: {
      building: '3707',
      coord: [ -101.8945214, 33.5197474 ],
      street: '82 Street',
      zipcode: '11372'
    },
    borough: 'Queens',
    cuisine: 'American ',
    grades: [
      {
        date: ISODate("2014-06-04T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-11-07T00:00:00.000Z"),
        grade: 'B',
        score: 19
      },
      {
        date: ISODate("2013-05-17T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2012-08-29T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2012-04-03T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2011-11-16T00:00:00.000Z"),
        grade: 'A',
        score: 7
      }
    ],
    name: 'Burger King',
    restaurant_id: '40534067'
  },
  {
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({$and:[{"cuisine":{$ne:"American"}},{"score":{$gt:70}},{"address.coord":{$lt:-65.754168}}]})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({$and:[{"cuisine":{$ne:"American"}},{"grades.score":{$gt:70}},{"address.coord":{$lt:-65.754168}}]})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d629"),
    address: {
      building: '65',
      coord: [ -73.9782725, 40.7624022 ],
      street: 'West   54 Street',
      zipcode: '10019'
    },
    borough: 'Manhattan',
    cuisine: 'American ',
    grades: [
      {
        date: ISODate("2014-08-22T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2014-03-28T00:00:00.000Z"),
        grade: 'C',
        score: 131
      },
      {
        date: ISODate("2013-09-25T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2013-04-08T00:00:00.000Z"),
        grade: 'B',
        score: 25
      },
      {
        date: ISODate("2012-10-15T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2011-10-19T00:00:00.000Z"),
        grade: 'A',
        score: 13
      }
    ],
    name: "Murals On 54/Randolphs'S",
    restaurant_id: '40372466'
  },
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({$and:[{"cuisine":{$ne:"American"}},{"grades.grade":A},{"borough":{$ne:"Brooklyn"}}]}).sort({cuisine:-1})
ReferenceError: A is not defined
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({$and:[{"cuisine":{$ne:"American"}},{"grades.grade":"A"},{"borough":{$ne:"Brooklyn"}}]}).sort({cuisine:-1})
[
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dbd7"),
    address: {
      building: '89',
      coord: [ -73.9995899, 40.7168015 ],
      street: 'Baxter Street',
      zipcode: '10013'
    },
    borough: 'Manhattan',
    cuisine: 'Vietnamese/Cambodian/Malaysia',
    grades: [
      {
        date: ISODate("2014-08-21T00:00:00.000Z"),
        grade: 'A',
        score: 13
      },
      {
        date: ISODate("2013-08-31T00:00:00.000Z"),
        grade: 'A',
        score: 13
      },
      {
        date: ISODate("2013-04-11T00:00:00.000Z"),
        grade: 'C',
        score: 3
      },
      {
        date: ISODate("2012-10-17T00:00:00.000Z"),
        grade: 'A',
        score: 4
      },
      {
        date: ISODate("2012-05-15T00:00:00.000Z"),
        grade: 'A',
        score: 10
      }
    ],
    name: 'Thai Son',
    restaurant_id: '40559606'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dc90"),
    address: {
      building: '8278',
      coord: [ -73.88143509999999, 40.7412552 ],
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:"/^Wil/"},{"restaurant_id":1,"cuisine":1,"name":1,"borough":1})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/^Wil/},{"restaurant_id":1,"cuisine":1,"name":1,"borough":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d2"),
    borough: 'Brooklyn',
    cuisine: 'Delicatessen',
    name: "Wilken'S Fine Food",
    restaurant_id: '40356483'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d5"),
    borough: 'Bronx',
    cuisine: 'American ',
    name: 'Wild Asia',
    restaurant_id: '40357217'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e2da"),
    borough: 'Bronx',
    cuisine: 'Pizza',
    name: 'Wilbel Pizza',
    restaurant_id: '40871979'
  }
]
Atlas atlas-m6gq77-shard-0 [primary] restaurants>
```

```
]
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/ces$/},{"restaurant":1,"cuisine":1,"name":1,"borough":1})
[
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27d95e"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Pieces'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27da1d"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'S.M.R Restaurant Services'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27da23"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Good Shepherd Services'
  },
  {
    _id: ObjectId("6176bc3d1c3aea4c6e27ded6"),
    borough: 'Queens',
    cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
    name: "The Ice Box-Ralph'S Famous Italian Ices"
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e0d8"),
    borough: 'Brooklyn',
    cuisine: 'Jewish/Kosher',
    name: 'Alices'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e2f4"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Re: Sources'
  }
]
Atlas atlas-m6gq77-shard-0 [primary] restaurants>
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/.*Reg.*/},{"restaurant_id":1,"borough":1,"cuisine":1,"name":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d3"),
    borough: 'Brooklyn',
    cuisine: 'American ',
    name: 'Regina Caterers',
    restaurant_id: '40356649'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d5d0"),
    borough: 'Manhattan',
    cuisine: 'Café/Coffee/Tea',
    name: 'Caffe Reggio',
    restaurant_id: '40369418'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d6df"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Regency Hotel',
    restaurant_id: '40382679'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27d9fc"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Regency Whist Club',
    restaurant_id: '40402377'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dadf"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'Rego Park Cafe',
    restaurant_id: '40523342'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e14d"),
    borough: 'Queens',
    cuisine: 'Pizza',
    name: 'Regina Pizza',
    restaurant_id: '40801325'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e364"),
    borough: 'Manhattan',
    cuisine: 'American ',
    name: 'Regal Entertainment Group',
    restaurant_id: '40891782'
```

```
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d3"),
    borough: 'Brooklyn',
    cuisine: 'American ',
    name: 'Regina Caterers',
    restaurant_id: '40356649'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d5d0"),
    borough: 'Manhattan',
```

```
  |
2 |
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"borough":"Bronx",$or:[{"cuisine":"American"},{"cuisine":"Chinese"}]})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4ee"),
    address: {
      building: '1236',
      coord: [ -73.8893654, 40.81376179999999 ],
      street: '238 Spofford Ave',
      zipcode: '10474'
    },
    borough: 'Bronx',
    cuisine: 'Chinese',
    grades: [
      {
        date: ISODate("2013-12-30T00:00:00.000Z"),
        grade: 'A',
        score: 8
      },
      {
        date: ISODate("2013-01-08T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2012-06-12T00:00:00.000Z"),
        grade: 'B',
        score: 15
      }
    ],
    name: 'Happy Garden',
    restaurant_id: '40363289'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d500"),
    address: {
      building: '277',
      coord: [ -73.8941893, 40.8634684 ],
      street: 'East Kingsbridge Road',
      zipcode: '10458'
    },
    borough: 'Bronx',
    cuisine: 'Chinese',
    grades: [
      {
        date: ISODate("2014-03-03T00:00:00.000Z"),
        grade: 'A',
        score: 10
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"borough":{$in:["Stalen Island","Queens","Bronxor Brooklyn"]}},{"restaurant_id":1,"name":1,"borough":1,"cuisine":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cf"),
    borough: 'Queens',
    cuisine: 'Jewish/Kosher',
    name: 'Tov Kosher Kitchen',
    restaurant_id: '40356068'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d0"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'Brunos On The Boulevard',
    restaurant_id: '40356151'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4db"),
    borough: 'Queens',
    cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
    name: 'Carvel Ice Cream',
    restaurant_id: '40361322'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4df"),
    borough: 'Queens',
    cuisine: 'Delicatessen',
    name: "Sal'S Deli",
    restaurant_id: '40361618'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4e1"),
    borough: 'Queens',
    cuisine: 'Delicatessen',
    name: "Steve Chu'S Deli & Grocery",
    restaurant_id: '40361998'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4e6"),
    borough: 'Queens',
    cuisine: 'Chinese',
    name: 'Ho Mei Restaurant',
    restaurant_id: '40362432'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4f0"),
    borough: 'Queens',
    cuisine: 'Delicatessen',
    name: "Tony'S Deli",
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"grades.score":{$lt:11}},{"borough":1,"cuisine":1,"name":1,"restaurant_id":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    borough: 'Bronx',
    cuisine: 'Bakery',
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cc"),
    borough: 'Brooklyn',
    cuisine: 'Hamburgers',
    name: "Wendy'S",
    restaurant_id: '30112340'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cd"),
    borough: 'Manhattan',
    cuisine: 'Irish',
    name: 'Dj Reynolds Pub And Restaurant',
    restaurant_id: '30191841'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4ce"),
    borough: 'Brooklyn',
    cuisine: 'American ',
    name: 'Riviera Caterer',
    restaurant_id: '40356018'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d0"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'Brunos On The Boulevard',
    restaurant_id: '40356151'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d1"),
    borough: 'Staten Island',
    cuisine: 'Jewish/Kosher',
    name: 'Kosher Island',
    restaurant_id: '40356442'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d2"),
    borough: 'Brooklyn',
    cuisine: 'Delicatessen',
    name: "Wilken'S Fine Food",
```

```
> 1 | db.addresses.find({name:/Wil/},{"cuisine":{$not:{"American, Chinees"}}},{"restaurant_id":1,"cuisine":1,"name":1,"borough":1})
  | 2 |

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/Wil/},{$and:[{"cuisine":{$ne:"American"}},{"cuisine":{$ne:"Chinees"}}]},{"restaurant_id":1,"cuisine":1,"name":1,"borough":1})
MongoServerError: Expression $ne takes exactly 2 arguments. 1 were passed in.
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({$or:[{name:/Wil/},{$and:[{"cuisine":{$ne:"American"}},{"cuisine":{$ne:"Chinees"}}]}]},{"restaurant_id":1,"cuisine":1,"name":1,"borough":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    borough: 'Bronx',
    cuisine: 'Bakery',
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cc"),
    borough: 'Brooklyn',
    cuisine: 'Hamburgers',
    name: "Wendy'S",
    restaurant_id: '30112340'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cd"),
    borough: 'Manhattan',
    cuisine: 'Irish',
    name: 'Dj Reynolds Pub And Restaurant',
    restaurant_id: '30191841'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4ce"),
    borough: 'Brooklyn',
    cuisine: 'American ',
    name: 'Riviera Caterer',
    restaurant_id: '40356018'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cf"),
    borough: 'Queens',
    cuisine: 'Jewish/Kosher',
    name: 'Tov Kosher Kitchen',
    restaurant_id: '40356068'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d0"),
    borough: 'Queens',
    cuisine: 'American ',
    name: 'Brunos On The Boulevard',
    restaurant_id: '40356151'
```

mongosh mongodb+srv://population.vd9k6.mongodb.net/population

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.coord.1":{$gt:42,$lte:52}},{"restaurants-id":1,"name":1,"address":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d76d"),
    address: {
      building: '47',
      coord: [-78.877224, 42.89546199999999],
      street: 'Broadway @ Trinity Pl',
      zipcode: '10006'
    },
    name: "T.G.I. Friday'S"
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d799"),
    address: {
      building: '1',
      coord: [-0.7119979, 51.6514664],
      street: 'Pennplaza E, Penn Sta',
      zipcode: '10001'
    },
    name: 'T.G.I. Fridays'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27d9f2"),
    address: {
      building: '3000',
      coord: [-87.86567699999999, 42.61150920000001],
      street: '47 Avenue',
      zipcode: '11101'
    },
    name: "Di Luvio'S Deli"
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dc27"),
    address: {
      building: '21972199',
      coord: [-78.589606, 42.8912372],
      street: 'Broadway',
      zipcode: '10024'
    },
    name: 'La Caridad 78'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e2f9"),
    address: {
      building: '7981',
      coord: [-84.9751215, 45.4713351],
      street: 'Hoyt Street',
      zipcode: '11201'
    },
  },

```
    borough: 'Manhattan',

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find().sort({"name":1})
[
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e15b"),
    address: {
      building: '129',
      coord: [ -73.962943, 40.685007 ],
      street: 'Gates Avenue',
      zipcode: '11238'
    },
    borough: 'Brooklyn',
    cuisine: 'Italian',
    grades: [
      {
        date: ISODate("2014-03-06T00:00:00.000Z"),
        grade: 'A',
        score: 5
      },
      {
        date: ISODate("2013-08-29T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2013-03-08T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2012-06-27T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2011-11-17T00:00:00.000Z"),
        grade: 'A',
        score: 12
      }
    ],
    name: '(Lewis Drug Store) Locanda Vini E Olii',
    restaurant_id: '40804423'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4d8"),
    address: {
      building: '1',
      coord: [ -73.96926909999999, 40.7685235 ],
      street: 'East   66 Street',
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find().sort({"name":-1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d58a"),
    address: {
      building: '6946',
      coord: [ -73.8811834, 40.7017759 ],
      street: 'Myrtle Avenue',
      zipcode: '11385'
    },
    borough: 'Queens',
    cuisine: 'German',
    grades: [
      {
        date: ISODate("2014-09-24T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2014-04-17T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2013-03-12T00:00:00.000Z"),
        grade: 'A',
        score: 13
      },
      {
        date: ISODate("2012-10-02T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2012-05-09T00:00:00.000Z"),
        grade: 'A',
        score: 13
      },
      {
        date: ISODate("2011-12-28T00:00:00.000Z"),
        grade: 'B',
        score: 24
      }
    ],
    name: 'Zum Stammtisch',
    restaurant_id: '40367377'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e0c4"),
```

Type here to search

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find().sort({"cuisine":1,"borough":-1})
[
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dbb6"),
    address: {
      building: '1345',
      coord: [ -73.959249, 40.768076 ],
      street: '2 Avenue',
      zipcode: '10021'
    },
    borough: 'Manhattan',
    cuisine: 'Afghan',
    grades: [
      {
        date: ISODate("2014-10-07T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2013-10-23T00:00:00.000Z"),
        grade: 'A',
        score: 8
      },
      {
        date: ISODate("2012-10-26T00:00:00.000Z"),
        grade: 'A',
        score: 13
      },
      {
        date: ISODate("2012-04-26T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2012-01-12T00:00:00.000Z"),
        grade: 'P',
        score: 10
      }
    ],
    name: 'Afghan Kebab House',
    restaurant_id: '40552806'
  },
  {
    _id: ObjectId("6176bc3d1c3aea4c6e27dce1"),
    address: {
      building: '34',
      coord: [ -73.9883612, 40.7286391 ],
      street: 'St Marks Place',
      zipcode: '10003'
```

```
      },

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.street":{$exist:"true"}})
MongoServerError: unknown operator: $exist
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.street":{$exists:"true"}})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    address: {
      building: '1007',
      coord: [ -73.856077, 40.848447 ],
      street: 'Morris Park Ave',
      zipcode: '10462'
    },
    borough: 'Bronx',
    cuisine: 'Bakery',
    grades: [
      {
        date: ISODate("2014-03-03T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2013-09-11T00:00:00.000Z"),
        grade: 'A',
        score: 6
      },
      {
        date: ISODate("2013-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2011-11-23T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2011-03-10T00:00:00.000Z"),
        grade: 'B',
        score: 14
      }
    ],
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cc"),
    address: {
      building: '469',
```

Type here to search

```
      score: 13
    },

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.coord.1":1,"address.coord.2":1})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.coord.0":1,"address.coord.1":1})

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"address.coord":{$type:1}})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    address: {
      building: '1007',
      coord: [ -73.856077, 40.848447 ],
      street: 'Morris Park Ave',
      zipcode: '10462'
    },
    borough: 'Bronx',
    cuisine: 'Bakery',
    grades: [
      {
        date: ISODate("2014-03-03T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2013-09-11T00:00:00.000Z"),
        grade: 'A',
        score: 6
      },
      {
        date: ISODate("2013-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2011-11-23T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2011-03-10T00:00:00.000Z"),
        grade: 'B',
        score: 14
      }
    ],
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
```

Type here to search

```
mongosh mongodb+srv://population.vd9k6.mongodb.net/population

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({"grades.score":{$mod:[7,0]}},{"restaurant_id":1,"names":1,"grades":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4cb"),
    grades: [
      {
        date: ISODate("2014-03-03T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2013-09-11T00:00:00.000Z"),
        grade: 'A',
        score: 6
      },
      {
        date: ISODate("2013-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate("2011-11-23T00:00:00.000Z"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2011-03-10T00:00:00.000Z"),
        grade: 'B',
        score: 14
      }
    ],
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d4ce"),
    grades: [
      {
        date: ISODate("2014-06-10T00:00:00.000Z"),
        grade: 'A',
        score: 5
      },
      {
        date: ISODate("2013-06-05T00:00:00.000Z"),
        grade: 'A',
        score: 7
      },
      {
        date: ISODate("2012-04-13T00:00:00.000Z"),
        grade: 'A',
        score: 12
```

```
Type "it" for more
Atlas atlas-m6gq77-shard-0 [primary] restaurants>

Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/.*mon.*/},{"name":1,"borough":1,"address.coord.1":1})
[
  {
    _id: ObjectId("6176bc391c3aea4c6e27d55f"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: "Desmond'S Tavern"
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d568"),
    address: { coord: [] },
    borough: 'Queens',
    name: 'Shimons Kosher Pizza'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d574"),
    address: { coord: [] },
    borough: 'Staten Island',
    name: 'Richmond County Country Club'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d59f"),
    address: { coord: [] },
    borough: 'Brooklyn',
    name: 'Lb Spumoni Gardens'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d5f1"),
    address: { coord: [] },
    borough: 'Brooklyn',
    name: "Bamonte'S Restaurant"
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d628"),
    address: { coord: [] },
    borough: 'Queens',
    name: 'Omonia Cafe'
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d6ab"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: "Delmonico'S Kitchen"
  },
  {
    _id: ObjectId("6176bc391c3aea4c6e27d84c"),
    address: { coord: [] },
```

```
Atlas atlas-m6gq77-shard-0 [primary] restaurants> db.addresses.find({name:/^Mad/},{"name":1,"borough":1,"address.coord.1":1})
[
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27da07"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: 'Madison Square'
  },
  {
    _id: ObjectId("6176bc3b1c3aea4c6e27dad5"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: 'Madras Mahal'
  },
  {
    _id: ObjectId("6176bc3d1c3aea4c6e27dd83"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: 'Madame X'
  },
  {
    _id: ObjectId("6176bc3d1c3aea4c6e27de33"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: 'Madison Bistro'
  },
  {
    _id: ObjectId("6176bc3d1c3aea4c6e27debc"),
    address: { coord: [] },
    borough: 'Brooklyn',
    name: 'Madiba'
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e1c1"),
    address: { coord: [] },
    borough: 'Bronx',
    name: "Madison'S"
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e23f"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: "Madame Tussaud'S"
  },
  {
    _id: ObjectId("6176bc3e1c3aea4c6e27e277"),
    address: { coord: [] },
    borough: 'Manhattan',
    name: 'Mad River Bar & Grille'
```