

Lab 3

- Using sort, skip and limit methods of the cursor.

```
Select mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.find().sort({"borough" : 1 });
{
  "_id": ObjectId("5eb3d668b31de5d588f4292e"),
  "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("5eb3d668b31de5d588f42933"),
  "address": {
    "building": "2300",
    "coord": [ -73.8786113, 40.8502883 ],
    "street": "Southern Boulevard",
    "zipcode": "10460"
  },
  "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"
}
```

```
Select mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.find().sort({"borough" : -1 });
{
  "_id": ObjectId("5eb3d668b31de5d588f4292c"),
  "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"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2014-05-20T00:00:00.000Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2013-04-04T00:00:00.000Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2012-01-24T00:00:00.000Z"),
      "grade": "A",
      "score": 9
    }
  ],
  "name": "Kosher Island",
  "restaurant_id": "40356442"
},
{
  "_id": ObjectId("5eb3d668b31de5d588f42950"),
  "address": {
    "building": "2491",
    "coord": [ -74.1459332, 40.6103714 ],
    "street": "Victory Boulevard",
    "zipcode": "10314"
  },
  "borough": "Staten Island",
  "cuisine": "Delicatessen",
  "grades": [
    {
      "date": ISODate("2015-01-09T00:00:00.000Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2014-05-20T00:00:00.000Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2013-04-04T00:00:00.000Z"),
      "grade": "A",
      "score": 12
    },
    {
      "date": ISODate("2012-01-24T00:00:00.000Z"),
      "grade": "A",
      "score": 9
    }
  ],
  "name": "Kosher Island",
  "restaurant_id": "40356442"
}
```

```
Select mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.find().sort({"borough" : -1 });
[
  {
    _id: ObjectId("5eb3d668b31de5d588f4292c"),
    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"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2014-05-20T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-04-04T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2012-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 9
      }
    ],
    name: 'Kosher Island',
    restaurant_id: '40356442'
  },
  {
    _id: ObjectId("5eb3d668b31de5d588f42950"),
    address: {
      building: '2491',
      coord: [ -74.1459332, 40.6103714 ],
      street: 'Victory Boulevard',
      zipcode: '10314'
    },
    borough: 'Staten Island',
    cuisine: 'Delicatessen',
    grades: [
      {
        date: ISODate("2015-01-09T00:00:00.000Z"),

```

```
Select mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.find().skip(2);
[
  {
    _id: ObjectId("5eb3d668b31de5d588f4292c"),
    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"),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate("2014-05-20T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-04-04T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2012-01-24T00:00:00.000Z"),
        grade: 'A',
        score: 9
      }
    ],
    name: 'Kosher Island',
    restaurant_id: '40356442'
  },
  {
    _id: ObjectId("5eb3d668b31de5d588f4292d"),
    address: {
      building: '469',
      coord: [ -73.961704, 40.662942 ],
      street: 'Flatbush Avenue',
      zipcode: '11225'
    },
    borough: 'Brooklyn',
    cuisine: 'Hamburgers',
    grades: [
      {
        date: ISODate("2014-12-30T00:00:00.000Z"),

```

- Running aggregation queries that use multiple stages (\$match, \$group, \$count, \$skip, \$limit, \$lookup, etc).

```
Select mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.aggregate({$match : { $or : [ { borough : 'Brooklyn'}, {borough : 'Queens'}}]});
[
  {
    _id: ObjectId("5eb3d668b31de5d588f4292a"),
    address: {
      building: '2780',
      coord: [ -73.98241999999999, 40.579505 ],
      street: 'Stillwell Avenue',
      zipcode: '11224'
    },
    borough: 'Brooklyn',
    cuisine: 'American',
    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
      },
      {
        date: ISODate("2011-10-12T00:00:00.000Z"),
        grade: 'A',
        score: 12
      }
    ],
    name: 'Riviera Cateren',
    restaurant_id: '40356018'
  },
  {
    _id: ObjectId("5eb3d668b31de5d588f4292b"),
    address: {
      building: '7114',
      coord: [ -73.9068506, 40.6199034 ],
      street: 'Avenue U',
      zipcode: '11234'
    },
    borough: 'Brooklyn',
    cuisine: 'Delicatessen',
    grades: [
      {
        date: ISODate("2014-05-29T00:00:00.000Z"),

```

```
mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.aggregate([
... {$match : { borough : "Brooklyn"}},
... {$count : "Dunkin' Donuts"},
... ]);
[ { "Dunkin' Donuts": 6086 } ]
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants>
```

```
mongosh mongodb+srv://<credentials>@cluster0.7nj7qs7.mongodb.net/myFirstDatabase
Atlas atlas-jp30ay-shard-0 [primary] sample_restaurants> db.restaurants.aggregate({$skip : 7});
[
  {
    _id: ObjectId("5eb3d668b31de5d588f42931"),
    address: {
      building: '6409',
      coord: [ -74.00528899999999, 40.628886 ],
      street: '11 Avenue',
      zipcode: '11219'
    },
    borough: 'Brooklyn',
    cuisine: 'American',
    grades: [
      {
        date: ISODate("2014-07-18T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-07-30T00:00:00.000Z"),
        grade: 'A',
        score: 12
      },
      {
        date: ISODate("2013-02-13T00:00:00.000Z"),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate("2012-08-16T00:00:00.000Z"),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate("2011-08-17T00:00:00.000Z"),
        grade: 'A',
        score: 11
      }
    ],
    name: 'Regina Caterers',
    restaurant_id: '40356649'
  },
  {
    _id: ObjectId("5eb3d668b31de5d588f42932"),
    address: {
      building: '1839',
      coord: [ -73.9482609, 40.6408271 ],
      street: 'Nostrand Avenue',
      zipcode: '11226'
    },

```