EXERCISE 1

```
INSERT DOCUMENTS show
dbs
                              0.000GB
admin
config
                              0.000GB
                          0.000GB
local
mongo_practice
                                                 0.000GB > use mongo_practice switched to
dbmongo_practice >db.movies.find.pretty() uncaught exception:
TypeError: db.movies.find.pretty is not a function :
@(shell):1:1
>db.movies.find()
{ "_id" : ObjectId("6104fa96e9faf8b7ac9daae4"), "title" : "fight club", "writer" : "Chuck Palahniuko", "year" : 1999, "actors" : [ "Brad Pitt",
"Edward Norton" ] }
{ "_id" : ObjectId("6104fb13e9faf8b7ac9daae5"), "title" : "pulp fiction", "writer" : "Quentin Tarantino", "year" : 1994, "actors" : [ "John
Travolta", "Uma Thurman" ] }
{ "_id" : ObjectId("6104fb7ae9faf8b7ac9daae6"), "title" : "inglorious basterds", "writer" : "Quentin Tarantino", "year" : 2009, "actors" : [
"Brad Pitt", "Diane Kruger", "Eli Roth" ] }
 \{ \ "\_id" : ObjectId("6104fc63e9faf8b7ac9daae7"), "title" : "The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "writer" : "J.R.R. \ Tolkein", "year" : 2012, The \ Hobbit: An \ Unexpected \ Journey", "year" : 2012, The \ Hobbit: An \ Unexpected \ J.R. \ Tolkein", "year" : 2012, The \ Hobbit:
"franchise" : "The Hobbit" }
>db.movies.find().pretty()
{
           "_id" :ObjectId("6104fa96e9faf8b7ac9daae4"),
           "title": "fight club",
           "writer": "Chuck Palahniuko",
           "year": 1999,
           "actors" : [
                     "Brad Pitt",
                     "Edward Norton"
          ]
           "_id": ObjectId("6104fb13e9faf8b7ac9daae5"),
           "title": "pulp fiction",
           "writer": "Quentin Tarantino",
           "year" : 1994,
           "actors" : [
                     "John Travolta",
                     "Uma Thurman"
          ]
```

```
{
    "_id":ObjectId("6104fb7ae9faf8b7ac9daae6"),
    "title": "inglorious basterds",
    "writer": "Quentin Tarantino",
    "year": 2009,
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
    "_id" :ObjectId("6104fc63e9faf8b7ac9daae7"),
    "title": "The Hobbit:An unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise" : "The Hobbit"
}
>db.movies.insert({title:"TheHobbit:The Desolation of Smaug", writer:"J.R.R. Tolkein", year:2013, franchise:"The Hobbit"}) WriteResult({
"nInserted" : 1 })
>db.movies.insert({title:"TheHobbit:The Battle of five Armies", writer:"J.R.R. Tolkein", year:2012, franchise:"The Hobbit", synopsis:"Biblo
and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from falling into the hands of a
rising darkness"})
WriteResult({ "nInserted" : 1 })
>db.movies.insert({title:"Pee Wee Herman's Big Adventure"})
WriteResult({ "nInserted" : 1 })
>db.movies.insert({title:"Avatar"})
WriteResult({ "nInserted" : 1 })
GET ALL DOCUMENT'S
db.movies.find().pretty()
    "_id" :ObjectId("6104fa96e9faf8b7ac9daae4"),
    "title": "fight club",
    "writer": "Chuck Palahniuko",
    "year" : 1999,
    "actors" : [
        "Brad Pitt",
        "Edward Norton"
```

```
}
    "_id" :ObjectId("6104fb13e9faf8b7ac9daae5"),
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    "writer": "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
        "John Travolta",
        "Uma Thurman"
    ]
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    "writer" : "Quentin Tarantino",
    "year" : 2009,
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
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    "year" : 2012,
    "franchise" : "The Hobbit"
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    "title": "The Hobbit:The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year" : 2013,
    "franchise" : "The Hobbit"
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"title": "The Hobbit:The Battle of five Armies",
    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise": "The Hobbit",
    "synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from
falling into the hands of a rising darkness"
    "_id" :ObjectId("61054a1320ea11fa5a5dd069"),
    "title": "Pee Wee Herman's Big Adventure"
}
{ "_id" : ObjectId("61054a1f20ea11fa5a5dd06a"), "title" : "Avatar" }
db.movies.find({writer:"Quentin Tarantino"}).pretty()
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    "writer": "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
        "John Travolta",
        "Uma Thurman"
    ]
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    "writer": "Quentin Tarantino",
    "year" : 2009,
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
db.movies.find({actors:{$in:["Brad Pitt"]}}).pretty()
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```

```
"title" : "fight club",
    "writer": "Chuck Palahniuko",
    "year" : 1999,
    "actors" : [
        "Brad Pitt",
         "Edward Norton"
    ]
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    "writer" : "Quentin Tarantino",
    "year" : 2009,
    "actors" : [
        "Brad Pitt",
         "Diane Kruger",
         "Eli Roth"
    ]
db.movies.find({franchise:"The Hobbit"}).pretty()
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    "year" : 2012,
    "franchise" : "The Hobbit"
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    "writer" : "J.R.R. Tolkein",
    "year" : 2013,
    "franchise" : "The Hobbit"
    "_id" :ObjectId("610549df20ea11fa5a5dd068"),
    "title": "The Hobbit:The Battle of five Armies",
```

```
"writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise" : "The Hobbit",
    "synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from
falling into the hands of a rising darkness"
db.movies.find (\{year: \{\$lt: 2000\}\}).pretty()
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    "title" : "fight club",
    "writer" : "Chuck Palahniuko",
    "year": 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
    ]
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    "title" : "pulp fiction",
    "writer": "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
         "John Travolta",
         "Uma Thurman"
    ]
}
db.movies.find({$or:[{year:{$lt:2000}},{year:{$gt:2010}}]}).pretty()
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    "title": "fight club",
    "writer": "Chuck Palahniuko",
    "year" : 1999,
    "actors" : [
         "Brad Pitt",
         "Edward Norton"
```

```
}
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    "writer": "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
        "John Travolta",
        "Uma Thurman"
    ]
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    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise" : "The Hobbit"
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    "title": "The Hobbit:The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year" : 2013,
    "franchise" : "The Hobbit"
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    "title": "The Hobbit:The Battle of five Armies",
    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise" : "The Hobbit",
    "synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from
falling into the hands of a rising darkness"
}
db.movies.update({title:"TheHobbit:An Unexpected Journey"},($set:{synopsis:"A reluctant hobbit Biblo Baggins sets out to the lonely
Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon smaug"}})
WriteResult(\{ \, "nMatched" : 0, \, "nUpserted" : 0, \, "nModified" : 0 \, \})
>db.movies.update({title:"TheHobbit:The Desolation of Smaug"},{$set:{synopsis:"The dwarves along with biblobaggins and gandalf the
grey, continue their quest to reclaim Erebor their homesland from SmaugBiblo Baggins is in possession of a mysterious and magical ring"}})
```

```
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 }) db.movies.update({title:"pulp fiction"},{$set:{actors:["Samuel L
Jackson"]}}) WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 }) db.movies.find().pretty()
    "_id" :ObjectId("6104fa96e9faf8b7ac9daae4"),
    "title": "fight club",
    "writer" : "Chuck Palahniuko",
    "year" : 1999,
    "actors" : [
        "Brad Pitt",
        "Edward Norton"
    ]
    "_id" :ObjectId("6104fb13e9faf8b7ac9daae5"),
    "title" : "pulp fiction",
    "writer" : "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
        "Samuel L Jackson"
    ]
    "_id":ObjectId("6104fb7ae9faf8b7ac9daae6"),
    "title": "inglorious basterds",
    "writer" : "Quentin Tarantino",
    "year" : 2009,
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
    "_id" :ObjectId("6104fc63e9faf8b7ac9daae7"),
    "title": "The Hobbit:An unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise": "The Hobbit",
```

```
"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their
mountain home- and the gold within it -from the dragon smaug"
{
    "_id":ObjectId("6105493820ea11fa5a5dd067"),
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     "writer": "J.R.R. Tolkein",
     "year": 2013,
     "franchise": "The Hobbit",
     "synopsis": "The dwarves along with biblobaggins and gandalf the grey, continue their quest to reclaim Erebor their homesland from
SmaugBiblo Baggins is in possession of a mysterious and magical ring"
     "_id" :ObjectId("610549df20ea11fa5a5dd068"),
     "title": "The Hobbit:The Battle of five Armies",
     "writer": "J.R.R. Tolkein",
     "year" : 2012,
     "franchise": "The Hobbit",
     "synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from
falling into the hands of a rising darkness"
}
{
     "_id" :ObjectId("61054a1320ea11fa5a5dd069"),
     "title": "Pee Wee Herman's Big Adventure"
{ "_id" : ObjectId("61054a1f20ea11fa5a5dd06a"), "title" : "Avatar" }
(i-search)`':
```

```
db.movies.find({synopsis:{$regex:"Biblo"}}).pretty()
            "_id": ObjectId("6104fc63e9faf8b7ac9daae7"),
"title": "The Hobbit:An unexpected Journey",
"writer": "J.R.R. Tolkein",
            writer : J.R.M. IOLKEIN ,
"year" : 2012,
"franchise" : "The Hobbit",
"synopsis" : "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon smaug"
           "_id" : ObjectId("6105493820ea11fa5a5dd067"),
"title" : "The Hobbit:The Desolation of Smaug",
"writer" : "J.R.R. Tolkein",
"year" : 2013,
"franchise" : "The Hobbit",
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"title": "The Hobbit:The Battle of five Armies",
"writer": "J.R.R. Tolkein",
"year": 2012,
"franchise": "The Hobbit",
"synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from falling into the hands of a rising darkness"
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            "title" : "The Hobbit:The Desolation of Smaug",
             "writer" : "J.R.R. Tolkein",
           "year": 2013,
"franchise": "The Hobbit",
"synopsis": "The dwarves along with biblo baggins and gandalf the grey, continue their quest to reclaim Erebor their homesland from SmaugBiblo Baggins is in possession of a mysterious and magical ring"
                         nd({$and:[{synopsis:{$regex:"Biblo"}},{synopsis:{$not:/gandalf/}}]}).pretty()
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"title" : "The Hobbit:An unexpected Journey",
"writer" : "J.R.R. Tolkein",
              "title": "The Mobblit on unspected ""
writer": "JR.R. Tolkien";
"year": 2012,
"Franchise": "The Hobbit",
"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon "
"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon "
"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon "
"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon "
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"writer" : "J.R.R. Tolkein",
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: 2012,
ise": "The Hobbit",
is": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from falling into the hands of a rising darkness"
is": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from falling into the hands of a rising darkness"
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"title": "The Hobbit:An unexpected Journey",

"writer": "J. R.R. Tolkein",

"year": 2012,

"franchier": "The Hobbit',

"synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon smaug"
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"mirter": '7.8 R. Tolkein",
"year": 2012,
"Yearn': 2012,
"Franchise": "The Hobbit',
"Symopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their mountain home- and the gold within it -from the dragon smaug"
db.movies.remove({title: "Pee Wee Herman's Big Adventure"})
WriteResult({ "nRemoved": 1 })
>db.movies.find().pretty()
{
           "_id" :ObjectId("6104fa96e9faf8b7ac9daae4"),
           "title": "fight club",
           "writer": "Chuck Palahniuko",
           "year": 1999,
           "actors" : [
                     "Brad Pitt",
```

```
"Edward Norton"
    ]
}
    "_id": ObjectId("6104fb13e9faf8b7ac9daae5"),
    "title" : "pulp fiction",
    "writer": "Quentin Tarantino",
    "year" : 1994,
    "actors" : [
        "Samuel L Jackson"
    ]
    "_id":ObjectId("6104fb7ae9faf8b7ac9daae6"),
    "title" : "inglorious basterds",
    "writer": "Quentin Tarantino",
    "year" : 2009,
    "actors" : [
        "Brad Pitt",
        "Diane Kruger",
        "Eli Roth"
    ]
    "_id" :ObjectId("6104fc63e9faf8b7ac9daae7"),
    "title": "The Hobbit:An unexpected Journey",
    "writer": "J.R.R. Tolkein",
    "year" : 2012,
    "franchise" : "The Hobbit",
    "synopsis": "A reluctant hobbit Biblo Baggins sets out to the lonely Mountain with a sprinted group of dwarves to reclaim their
mountain home- and the gold within it -from the dragon smaug"
{
    "_id" :ObjectId("6105493820ea11fa5a5dd067"),
    "title": "The Hobbit:The Desolation of Smaug",
    "writer": "J.R.R. Tolkein",
    "year" : 2013,
    "franchise": "The Hobbit",
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"synopsis": "The dwarves along with biblobaggins and gandalf the grey, continue their quest to reclaim Erebor their homesland from

```
SmaugBiblo Baggins is in possession of a mysterious and magical ring"
{
   "_id": ObjectId("610549df20ea11fa5a5dd068"),
   "title": "The Hobbit:The Battle of five Armies",
   "writer": "J.R.R. Tolkein",
   "year": 2012,
   "franchise": "The Hobbit",
   "synopsis": "Biblo and company are forced to engage in a war against an array of combatants and keep the lonely Mountain from
falling into the hands of a rising darkness"
{ "_id" : ObjectId("61054a1f20ea11fa5a5dd06a"), "title" : "Avatar" }
db.movies.remove({title:"Avatar"})
WriteResult({ "nRemoved": 1 })
>db.movies.find().pretty()
  db.users.insert( {username: "GoodGuyGreg", first_name:"Good Guy", last_name:"Greg"})
 writeResult({ "nInserted" : 1 })
> db.users.insert( {username: "ScumbagSteve",full_name:{ first:"Scumbag", last:"Steve"}})
WriteResult({ "nInserted" : 1 })
db.users.find().pretty()
          "_id" : ObjectId("6105a672cb8f46e2f3f99f03"),
          "username": "GoodGuyGreg",
          "first_name" : "Good Guy",
          "last name" : "Greg"
          "_id" : ObjectId("6105a6d2cb8f46e2f3f99f04"),
          "username": "ScumbagSteve",
          "full name" : {
                      "first" : "Scumbag",
                      "last" : "Steve"
```

```
"_id" : ObjectId("6105a7a2cb8f46e2f3f99f05"),
"username" : "GoodGuyGreg",
       __u . GoodGuyGreg",
"username" : "GoodGuyGreg",
"title" : "Passes out at party",
"body" : "Wakes up early and cleans house"
       "_id" : ObjectId("6105a7d1cb8f46e2f3f99f06"),
       "username" : "GoodGuyGreg",
"title" : "Steals your identity",
"body" : "Raises your credit score"
        "_id" : ObjectId("6105a7facb8f46e2f3f99f07"),
       ____
"username" : "GoodGuyGreg",
"title" : "Reports a bug in your code",
"body" : "Sendsd you a Pull Request"
        "_id" : ObjectId("6105a824cb8f46e2f3f99f08"),
       "username": "ScumbagSteve",
"title": "Borrows something",
"body": "Sells it"
       "_id" : ObjectId("6105a86acb8f46e2f3f99f09"),
       "username" : "ScumbagSteve",
"title" : "Borrows everything",
"body" : "The end"
       "_id" : ObjectId("6105a88dcb8f46e2f3f99f0a"),
 db.posts.aggregate([{
.. $match:{title:"Reports a bug in your code"}},
.. {$lookup:{from:'comments', localField:'_id', foreignField:'post', as:'comments'}}]).pretty()
           "_id" : ObjectId("6105a7facb8f46e2f3f99f07"),
          "username": "GoodGuyGreg",
"title": "Reports a bug in your code",
"body": "Sendsd you a Pull Request",
           "comments" : [
                                   "_id" : ObjectId("6105b050cb8f46e2f3f99f14"),
                                   "username" : "ScumbagSteve",
"comment" : "Denied your PR cause I found a hack",
                                   "post" : ObjectId("6105a7facb8f46e2f3f99f07")
```

```
ub.comments.insert( {username: GoodGuyGreg , comment: "whats mine is yours", post:ObjectId("6105a64acb8f46e2f3f99f09")})

db.comments.insert( {username: "GoodGuyGreg", comment: "whats mine is yours", post:ObjectId("6105a64acb8f46e2f3f99f09")})
 iteResult({ Interfect ..., }, db.comments whats mine is yours , posted).

iteResult({ "nInserted" : 1 }) db.comments "GoodGuyGreg", comment: "dont violate the license agreement!", post:ObjectId("6105a88dcb8f46e2f3f99f0a")}) db.comments.insert( {username: "GoodGuyGreg", comment: "dont violate the license agreement!", post:ObjectId("6105a88dcb8f46e2f3f99f0a")})
 iteResult({ "ninserteu . 1 }/
db.comments.insert( {username: "ScumbagSteve", comment:"It still isnt clear ; post.objected
iteResult({ "ninserted" : 1 })
db.comments.insert( {username: "ScumbagSteve", comment:"Denied your PR cause I found a hack", post:ObjectId("6105a7facb8f46e2f3f99f07")})
db.comments.insert( {username: "ScumbagSteve", comment:"Denied your PR cause I found a hack", post:ObjectId("6105a7facb8f46e2f3f99f07")})
 > db.comments.find().pretty()
                     "_id" : ObjectId("6105afd1cb8f46e2f3f99f10"),
                     "username" : "GoodGuyGreg",
"comment" : "Hope you get a good deal!",
                     "post" : ObjectId("6105a824cb8f46e2f3f99f08")
                     "_id" : ObjectId("6105affdcb8f46e2f3f99f11"),
                     "username": "GoodGuyGreg",
"comment": "whats mine is yours",
                     "post" : ObjectId("6105a64acb8f46e2f3f99f09")
                     "_id" : ObjectId("6105b018cb8f46e2f3f99f12"),
                    "username" : "GoodGuyGreg",
"comment" : "dont violate the license agreement!",
                     "post": ObjectId("6105a88dcb8f46e2f3f99f0a")
                     "_id" : ObjectId("6105b037cb8f46e2f3f99f13"),
                     "username" : "ScumbagSteve",
"comment" : "It still isnt clear",
                     "post" : ObjectId("6105a7a2cb8f46e2f3f99f05")
                     "_id" : ObjectId("6105b050cb8f46e2f3f99f14"),
                     "username" : "ScumbagSteve",
"comment" : "Denied your PR cause I found a hack",
                     "post" : ObjectId("6105a7facb8f46e2f3f99f07'
                                                                               "Passes out at party", "body" : "Wakes up early and cleans house" }
"Steals your identity", "body" : "Raises your credit score" }
"Reports a bug in your code", "body" : "Sendsd you a Pull Request" }
                                                                                "Hope you get a good deall", "post" : ObjectId("6105a824cb8f46e2f3f99f08") }
"whats mine is yours", "post" : ObjectId("6105a64acb8f46e2f3f99f09") }
"dont violate the license agreement!", "post" : ObjectId("6105a88dcb8f46e2f3f99f0a") }
db.posts.aggregate([
$match: { title: 'Reports a bug in your code' }
},
$lookup: { from:
'comments',
localField: ' id',
foreignField: 'post',
as: 'comments'
]).pretty();
```

EXERCISE 2

ATLANTA POPULATION

```
Microsoft Windows (Version 10.0.19042,1110] (c) (Microsoft Corporation. All rights reserved.

C:\Users\USER\Downloads\mongodb-database-tools-windows-x86_64-100.4.1\mongodb-database-tools-windows-x86_64-100.4.1\binmongoimport --db population --collection zipcodes --file C:\Users\USER\Assignments\zip.json 2021-08-0112:11:19.15246530 connected to: mongodb://localhost/
0201-08-0112:11:19.05346530 29353 document(s) imported accessfully. 0 document(s) failed to import.

C:\Users\USER\Downloads\mongodb-database-tools-windows-x86_64-100.4.1\mongodb-database-tools-windows-x86_64-100.4.1\bin>
```

1.

```
db.zipcodes.find({$and:[{city:"ATLANTA"},{state:"GA"}]}).pretty()
show dbs
admin
                    0.000GB
config
                    0.000GB
local
                    0.000GB
mongo practice 0.000GB
population
                    0.002GB
> use population
switched to db population
 ob.zipcodes.find({$and:[{city:"ATLANTA"},{state:"GA"}]}).pretty()
          "_id" : "30303",
"city" : "ATLANTA",
"loc" : [
                    -84.388846,
                    33.752504
         ],
"pop" : 1845,
to" : "GA
          "state" : "GA"
          "_id" : "30305",
"city" : "ATLANTA",
          "loc" : [
                     -84.385145,
                    33.831963
         ],
"pop" : 19122,
"state" : "GA"
         "_id" : "30306",
"city" : "ATLANTA",
"loc" : [
                    -84.351418,
                    33.786027
          ],
"pop" : 20081,
"state" : "GA"
          "_id" : "30307",
"city" : "ATLANTA",
"loc" : [
                    -84.335957,
                    33.769138
```

2.

```
db.zipcodes.aggregate([{$match:{city:"ATLANTA", state:"GA"}}])
"_id" : "30303", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ],
            "30303",
"30305",
"30306",
                                                                                                                       "pop"
                                                                                                                                    1845, "state" :
                                                                                                                                                               "GA" }
                           "city
                                          "ATLANTA",
                                                            "loc"
                                                                                                                       "pop"
"pop"
   id"
                                                                             -84.385145, 33.831963
                                                                                                                                    19122, "state"
                                                                                                                                                                 "GA"
                                                                                                                                    20081, "state"
                                                            "loc"
  id"
                           "city"
                                                                             -84.351418, 33.786027
                                                                                                                                   16330, "state" :
                                         "ATLANTA", "loc"
"ATLANTA", "loc"
"ATLANTA", "loc"
"ATLANTA", "loc"
            "30307",
"30308",
                            "city"
   id"
                                                                             -84.335957, 33.769138
                                                                                                                       "pop"
                                                                                                                                                                 "GA"
                           "city"
                                                                                                                       "pop"
   id"
                                                                             -84.375744, 33.771839
                                                                                                                                                               "GA"
            "30308",
"30309",
"30312",
                                                                             -84.388338, 33.798407
                                                                                                                                   14766, "state"
                           "city"
   id"
                                                                                                                       "pop"
                                                                                                                                                                 "GA"
        : "30312", "city"
: "30310", "city"
: "30311", "city"
: "30315", "city"
: "30315", "city"
: "30316", "city"
: "30316", "city"
: "30324", "city"
: "30324", "city"
: "30326", "city"
: "30327", "city"
: "30330", "city"
                           "city"
                                                                                                                       "pop"
                                                                                                                                               "state"
   id"
                                                                                                                                                                "GA"
                                                                             -84.378125, 33.746749
                                                                                                                                 : 17683,
                                      : "ATLANTA", "loc"
                                                                                                                                   34017, "state"
34880, "state"
                                                                                                                       "pop"
                                                                                                                                                                 "GA"
   id"
                                                                             -84.423173, 33.727849
                                                                             -84.470219, 33.722957 ], "pop"
-84.39352, 33.76825 ], "pop" :
                                                                                                                                    34880,
                                                                                                                                                                 "GA"
   id"
  id"
                                                            "loc" :
                                                                                                                                8038, "state" : "GA" }
                                                                             -84.39352, 33.76825 ],
                                                                                                                      pop":
"pop"
"pop"
                                                                                                                                   41061, "state":
26649, "state":
16395, "state":
   id"
                                                                            -84.380771, 33.76360
-84.425546, 33.756103 ], "pop"
                                                                                                                                                                 "GA"
  id"
                                                            "loc" :
                                                                                                                                                                "GA"
                                                                                                                       . op" :
"рор"
                                       : "ATLANTA",
: "ATLANTA",
                                                            "loc"
                                                                             -84.31685, 33.749788 ],
-84.333913, 33.721686 ],
   id"
                                                                                                                                  16395,
                                                                                                                                   34668, "state"
                                                                                                                                                                 "GA"
                                                                                                                                    53894, "state":
15044, "state":
                                          "ATLANTA",
                                                                                                                       "pop"
                                                                             -84.445432, 33.786454
                                                                                                                                                                "GA"
   id"
                                          "ATLANTA",
                                                            "loc"
   id"
                                                                             -84.354867, 33.820609
                                                                                                                  ],
                                                                                                                                   32138, "stae
32138, "state"
                                          "ATLANTA",
   id"
                                                                             -84.335091, 33.868728
                                                                                                                       "pop"
                                                                                                                                               "state"
                                          "ATLANTA", "loc"
"ATLANTA", "loc"
"ATLANTA", "loc"
                                                                            -84.358232, 33.848168
                                                                                                                       "pop"
   id"
                                                                                                                                                             "GA"
                                                                            -84.419966, 33.862723 ], "pop" : 18467, "state" : "
-84.434735, 33.70645 ], "pop" : 643, "state" : "GA"
   id"
                                                                                                                                                                "GA"
  id"
                                                                          [ -84.434735, 33.70645 ],
    "it" for more
```

3.

```
> db.students.aggregate([{$match:{city:"ATLANTA"}},{$count:"Total number of zipcodes"}])
> db.zipcodes.aggregate([{$match:{city:"ATLANTA"}},{$count:"Total number of zipcodes"}])
{ "Total number of zipcodes" : 41 }
```

4.

```
odes.aggregate([{$sort:{pop:-1}}])
    "606623", "city": "CHICAGO", "loc": [ -87.7157, 41.849015 ], "pop": 112047, "state": "IL" }
    "11226", "city": "BROOKLYN", "loc": [ -73.956985, 40.646694 ], "pop": 111396, "state": "NY" }
    "10021", "city": "NEW YORK", "loc": [ -73.958805, 40.768476 ], "pop": 106564, "state": "NY" }
    "10025", "city": "NEW YORK", "loc": [ -73.968312, 40.797466 ], "pop": 100027, "state": "NY" }
    "09201", "city": "BELL GARDENS", "loc": [ -118.17205, 33.969177 ], "pop": 99568, "state": "CA" }
    "60647", "city": "CHICAGO", "loc": [ -87.556012, 41.725743 ], "pop": 998612, "state": "IL" }
    "90011", "city": "LOS ANGELES", "loc": [ -118.258189, 34.007856 ], "pop": 996074, "state": "CA" }
    "60647", "city": "CHICAGO", "loc": [ -87.704322, 41.920903 ], "pop": 99971, "state": "IL" }
    "90650", "city": "CHICAGO", "loc": [ -87.624277, 41.693443 ], "pop": 94317, "state": "IL" }
    "60620", "city": "NORWALK", "loc": [ -87.654251, 41.741119 ], "pop": 94188, "state": "IL" }
    "60629", "city": "CHICAGO", "loc": [ -87.706936, 41.778149 ], "pop": 91814, "state": "IL" }
    "60609", "city": "CHICAGO", "loc": [ -87.653279, 41.809721 ], "pop": 89762, "state": "IL" }
    "60618", "city": "CHICAGO", "loc": [ -87.704214, 41.946401 ], "pop": 88377, "state": "IL" }
    "11373", "city": "JACKSON HEIGHTS", "loc": [ -73.878551, 40.740388 ], "pop": 88241, "state": "NY" }
    "11373", "city": "JACKSON HEIGHTS", "loc": [ -73.878551, 40.740388 ], "pop": 88441, "state": "NY" }
    "11373", "city": "JACKSON HEIGHTS", "loc": [ -73.878551, 40.740388 ], "pop": 88441, "state": "NY" }
    "11373", "city": "JACKSON HEIGHTS", "loc": [ -73.878551, 40.740388 ], "pop": 88441, "state": "NY" }
    "11378", "city": "JACKSON HEIGHTS", "loc": [ -73.878551, 40.740388 ], "pop": 88441, "state": "NY" }
                                          odes.aggregate(['
"60623", "city"
"11226", "city"
"10021", "city"
"90201", "city"
"90201", "city"
"90011", "city"
"60647", "city"
"60628", "city'
"60620", "city'
"60629", "city'
"60609", "city'
"60618", "city
_id"
 id"
_id"
 id"
id"
   id"
 id"
   id"
 id"
   id"
 id"
   id"
   id"
                                                                                                                                                                                                                                        "CHICAGO", "loc" : [ -87.6532/9, 41.809/21 ], "pop" : 89/62, "state" : "IL" }
"CHICAGO", "loc" : [ -87.704214, 41.946401 ], "pop" : 88317, "state" : "IL" }
"JACKSON HEIGHTS", "loc" : [ -73.878551, 40.740388 ], "pop" : 88241, "state" : "ARLETA", "loc" : [ -118.420692, 34.258081 ], "pop" : 88114, "state" : "CA" }
"BROOKLYN", "loc" : [ -73.914483, 40.662474 ], "pop" : 87079, "state" : "NY" }
"SOUTH GATE", "loc" : [ -118.201349, 33.94617 ], "pop" : 87026, "state" : "CA"
"RIDGEWOOD", "loc" : [ -73.896122, 40.703613 ], "pop" : 85732, "state" : "NY" ]
"BRONX", "loc" : [ -73.871242, 40.873671 ], "pop" : 85710, "state" : "NY" }
   id"
                                                          "60618", "city"
"11373", "city"
"91331", "city"
"11212", "city"
"90280", "city"
"11385", "city"
"10467", "city"
     id"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : "NY" }
   id"
   id"
                                                            for more
```

POPULATION BY STATE

2.

```
db.zipcodes.aggregate([{$group:{_id:"$state"}},{$sort:{pop:-1}}])
          "NV"
          "TX"
          "AZ"
          "CO"
          "MO"
          "ME"
          "CA"
          "MA"
  id"
          "KY"
          "NJ"
          "MI"
         "ID"
  id"
          "DC"
          "CT"
          "NY"
          "MT"
          "UT"
          "NE"
  id"
          "GA"
   "it" for more
    db.zipcodes.aggregate({$match:{city:"ATLANTA"}},{$group:{_id:'$city',zips:{$sum:1}}}) {
```

```
"_id" : "ATLANTA", "zips" : 41 }
db.zipcodes.aggregate(\{\$match:\{city: "ATLANTA"\}\}, \{\$group: \{\_id: \$city', Population: \{\$sum: \$pop'\}\}\}))
 \{ "\_id" : "ATLANTA", "Population" : 630046 \} \ db.zipcodes.aggregate ( \{\$group: \_id: \$state', Population: \{\$sum: \$pop'\}\} \}) 
{ "_id" : "NV", "Population" : 1201833 }
{ "_id" : "TX", "Population" : 16984601 }
{ "_id" : "WY", "Population" : 453528 }
\{\,\hbox{\tt "\_id"}:\hbox{\tt "AZ"},\hbox{\tt "Population"}:3665228\,\}
{ "_id" : "CO", "Population" : 3293755 }
{ "_id" : "MO", "Population" : 5110648 }
{ "_id" : "ME", "Population" : 1226648 }
{ "_id" : "CA", "Population" : 29754890 }
{ "_id" : "MA", "Population" : 6016425 }
{ "_id" : "KY", "Population" : 3675484 }
{ "_id" : "NJ", "Population" : 7730188 }
{ "_id" : "MI", "Population" : 9295297 }
{ "_id" : "ID", "Population" : 1006749 }
{ "_id" : "DC", "Population" : 606900 }
{ "_id" : "CT", "Population" : 3287116 }
{ "_id" : "NY", "Population" : 17990402 }
```

```
{ "_id" : "MT", "Population" : 798948 }
{ "_id" : "UT", "Population" : 1722850 }
{ "_id" : "NE", "Population" : 1578139 }
{ "_id" : "GA", "Population" : 6478216 }
Type "it" for more
          \label{thm:population:population:population:population:population:qsum:population:qsum:population:-1}\}, \{simit:3\}) \\
{ "_id" : { "state" : "CA" }, "population" : 29754890 }
{ "_id" : { "state" : "NY" }, "population" : 17990402 }
{ "_id" : { "state" : "TX" }, "population" : 16984601 }
POPULATION BY CITY
           db.zipcodes.aggregate({$group:{_id:{city:'$city',state:"$state"},population:{$sum:'$pop'}}})
{ "\_id" : { "city" : "SAINT PETERS", "state" : "MO" }, "population" : 43133 }
{ "_id" : { "city" : "PRICHARD", "state" : "WV" }, "population" : 1215 }
 \{ \, "\_id" : \{ \, "city" : \, "RANCHITA", \, "state" : \, "CA" \, \}, \, "population" : 389 \, \} 
{ "_id" : { "city" : "DARDANELLE", "state" : "AR" }, "population" : 8281 }
{ "_id" : { "city" : "TRIDELL", "state" : "UT" }, "population" : 363 }
{ "\_id" : { "city" : "TURTLE CREEK", "state" : "PA" }, "population" : 8157 }
{ "_id" : { "city" : "HOUSTON", "state" : "PA" }, "population" : 6060 }
{ "_id" : { "city" : "MALONE", "state" : "TX" }, "population" : 491 }
{ "_id" : { "city" : "ROUND MOUNTAIN", "state" : "NV" }, "population" : 1302 }
{ "\_id" : { "city" : "ROSSFORD", "state" : "OH" }, "population" : 5861 }
{ "_id" : { "city" : "SAN MARTIN", "state" : "CA" }, "population" : 5563 }
{ "_id" : { "city" : "FAIRBANKS", "state" : "AK" }, "population" : 31379 }
 \{ \ "\_id" : \{ \ "city" : "SOUTH \ SHORE", \ "state" : "SD" \}, \ "population" : 487 \ \} 
{ "_id" : { "city" : "HOSSTON", "state" : "LA" }, "population" : 766 }
{ "_id" : { "city" : "PEMBERTON", "state" : "MN" }, "population" : 880 }
\{\, "\_id": \{\, "city": "HOPE", \, "state": "RI" \, \}, \, "population": 3653 \, \}
 \{ \, "\_id" : \{ \, "city" : "COATS", \, "state" : "NC" \, \}, \, "population" : 4437 \, \} 
{ "_id" : { "city" : "PECK", "state" : "KS" }, "population" : 1023 }
{ "_id" : { "city" : "FORT BENTON", "state" : "MT" }, "population" : 2795 }
{ "\_id" : { "city" : "LAWRENCE", "state" : "NE" }, "population" : 594 }
Type "it" for more
           db.zipcodes.aggregate({$group:{_id:{city:"$city",state:"$state"},population:{$sum:'$pop'}}},{$sort:{population:-1}})
 \{ \, "\_id" : \{ \, "city" : \, "CHICAGO", \, "state" : \, "IL" \, \}, \, "population" : 2452177 \, \} 
{ "_id" : { "city" : "BROOKLYN", "state" : "NY" }, "population" : 2300504 }
{ "_id" : { "city" : "LOS ANGELES", "state" : "CA" }, "population" : 2102295 }
```

```
{ "_id" : { "city" : "HOUSTON", "state" : "TX" }, "population" : 2095918 }
{ " id" : { "city" : "PHILADELPHIA", "state" : "PA" }, "population" : 1610956 }
{ "_id" : { "city" : "NEW YORK", "state" : "NY" }, "population" : 1476790 }
{ "_id" : { "city" : "BRONX", "state" : "NY" }, "population" : 1209548 }
 \{\, "\_id": \{\, "city": "SAN \,\, DIEGO", \,\, "state": "CA" \,\, \}, \,\, "population": 1049298 \,\, \} 
{ "_id" : { "city" : "DETROIT", "state" : "MI" }, "population" : 963243 }
{ "_id" : { "city" : "DALLAS", "state" : "TX" }, "population" : 940191 }
{ "_id" : { "city" : "PHOENIX", "state" : "AZ" }, "population" : 890853 }
{ "_id" : { "city" : "MIAMI", "state" : "FL" }, "population" : 825232 }
{ "_id" : { "city" : "SAN JOSE", "state" : "CA" }, "population" : 816653 }
{ "_id" : { "city" : "SAN ANTONIO", "state" : "TX" }, "population" : 811792 }
{ "_id" : { "city" : "BALTIMORE", "state" : "MD" }, "population" : 733081 }
{ "\_id" : { "city" : "SAN FRANCISCO", "state" : "CA" }, "population" : 723993 } 
{ "_id" : { "city" : "MEMPHIS", "state" : "TN" }, "population" : 632837 }
{ "_id" : { "city" : "SACRAMENTO", "state" : "CA" }, "population" : 628279 }
{ "_id" : { "city" : "JACKSONVILLE", "state" : "FL" }, "population" : 610160 }
{ "_id" : { "city" : "ATLANTA", "state" : "GA" }, "population" : 609591 }
Type "it" for more
             3. \qquad db.zipcodes.aggregate(\{\$group: \{\_id: \{city: \$city''\}, population: \{\$sum: \$pop'\}\}\}, \{\$sort: \{population: -1\}\}, \{\$limit: 3\})
{ "_id" : { "city" : "CHICAGO" }, "population" : 2452177 }
{ "_id" : { "city" : "BROOKLYN" }, "population" : 2341387 }
{ "_id" : { "city" : "HOUSTON" }, "population" : 2123053 }
           4. db.zipcodes.aggregate({$match:{state:"TX"}},{$group:{_id:'$city',Population:{$sum:'$pop'}}},{$sort:{Population:-
                 1}},{$limit:3})
{ "_id" : "HOUSTON", "Population" : 2095918 }
{ "_id" : "DALLAS", "Population" : 940191 } { "_id"
: "SAN ANTONIO", "Population" : 811792 }
db.zipcodes.aggregate([
... { $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } }, ...
{ $group: { _id: "$_id.state", avgCityPop: { $avg: "$pop" } } }
{ "_id" : "NV", "avgCityPop" : 18209.590909090908 }
{ "_id" : "TX", "avgCityPop" : 13775.02108678021 }
{ "_id" : "WY", "avgCityPop" : 3384.5373134328356 }
{ "_id" : "AZ", "avgCityPop" : 20591.16853932584 }
{ "_id" : "CO", "avgCityPop" : 9981.075757575758 }
{ "_id" : "MO", "avgCityPop" : 5672.195338512764 }
{ "_id" : "ME", "avgCityPop" : 3006.4901960784314 }
```

```
\{\,\hbox{\tt "\_id"}:\hbox{\tt "CA"},\hbox{\tt "avgCityPop"}:27756.42723880597\,\}
{ "_id" : "MA", "avgCityPop" : 14855.37037037037 }
\{\,\hbox{\tt "\_id"}:\hbox{\tt "KY"},\hbox{\tt "avgCityPop"}:4767.164721141375}\,\}
{ "_id" : "NJ", "avgCityPop" : 15775.89387755102 }
{ "_id" : "MI", "avgCityPop" : 12087.512353706112 }
\{\,\hbox{\tt "\_id"}: \hbox{\tt "ID"}, \hbox{\tt "avgCityPop"}: 4320.811158798283\,\}
{ "_id" : "DC", "avgCityPop" : 303450 }
{ "_id" : "CT", "avgCityPop" : 14674.625 }
{ "_id" : "MT", "avgCityPop" : 2593.987012987013 }
{ "_id" : "NY", "avgCityPop" : 13131.680291970803 }
\{\,\hbox{\tt "\_id"}:\hbox{\tt "UT"},\hbox{\tt "avgCityPop"}:9518.508287292818\,\}
{ "_id" : "NE", "avgCityPop" : 3034.882692307692 }
{ "_id" : "GA", "avgCityPop" : 11547.62210338681 }
Type "it" for more BONUS
1
db.zipcodes.aggregate([\{\$sort:\{avgCityPop:-1\}\},\{\$limit:3\}])
{ "_id" : "01026", "city" : "CUMMINGTON", "loc" : [ -72.905767, 42.435296 ], "pop" : 1484, "state" : "MA" }
 \{ "\_id" : "01013", "city" : "CHICOPEE", "loc" : [ -72.607962, 42.162046 ], "pop" : 23396, "state" : "MA" \} 
{ "_id" : "01011", "city" : "CHESTER", "loc" : [ -72.988761, 42.279421 ], "pop" : 1688, "state" : "MA" } BONUS
2
db.zipcodes.aggregate( [{ $group: {_id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } }, { $group: {_id: "$_id.state", avgCityPop: {
$avg: "$pop" } } },{$sort:{avgCityPop:-1}},{$limit:3}] )
{ "\_id" : "DC", "avgCityPop" : 303450 }
{ "_id" : "CA", "avgCityPop" : 27756.42723880597 }
{ "_id" : "FL", "avgCityPop" : 27400.958963282937 }
```

EXERCISE 3

MONGODB COMPLEX QUERIES

C:\Users\USER\Downloads\mongodb-database-tools-windows-x86 64-100.4.1\mongodb-database-tools-windows-x86 64-100.4. x86 64100.4.1\bin>mongoimport --db restaurants --collection addresses--file C:\Users\USER\Assignments\restaurants.json

2021-08-02T01:08:39.731+0530 connected to: mongodb://localhost/

2021-08-02T01:08:39.834+0530 3772 document(s) imported successfully. 0 document(s) failed to import.

EXERCISE QNS 1.

```
dresses.find().pretty()
       ": ObjectId("6106f99585e29051a03be21d"),
             "building" : "97-22",
                           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"
```

2.

```
b.restaurant.find({}},{"restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1,"_id":0});
b.addresses.find({}},("restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1,"_id":0});
borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356068" }
borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356442" }
borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Morris Park Bake Shop", "restaurant_id" : "40356445" }
borough" : "Brooklyn", "cuisine" : "American ", "name" : "May May Kitchen", "restaurant_id" : "40358429" }
borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356669" }
borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterers", "restaurant_id" : "40356018" }
borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360076"
borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Seuda Foods", "restaurant_id" : "40360045" }
borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40361060" }
borough" : "Brooklyn", "cuisine" : "Jelicatessen", "name" : "Seuda Foods", "restaurant_id" : "40361618" }
borough" : "Manhattan", "cuisine" : "Delicatessen", "name" : "Seula Foods", "restaurant_id" : "40361708" }
borough" : "Manhattan", "cuisine" : "American ", "name" : "Glorious Food", "restaurant_id" : "40361708" }
borough" : "Manhattan", "cuisine" : "American ", "name" : "Steve Chu's Delia, "restaurant_id" : "40361708" }
borough" : "Manhattan", "cuisine" : "American ", "name" : "Steve Chu's Delia, "restaurant_id" : "40361708" }
borough" : "Manhattan", "cuisine" : "American ", "name" : "Catering Service", "restaurant_i
                  porough" : "Man
e "it" for more
```

3.

```
> db.addresses.find((),("restaurant_id" : 1,"name":1,"borough":1,"cuisine" : 1));
(" id" : 0bjectId("6166f99585e229651a03be21a"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356642" }
(" id" : 0bjectId("6166f99585e220651a03be21a"), "borough" : "Brookly", "cuisine" : "Jewish/Kosher", "name" : "Kosher Island", "restaurant_id" : "40356642" }
(" id" : 0bjectId("6166f99585e220651a03be21a"), "borough" : "Brookly", "cuisine" : "Makery", "name" : "Moris Park Bake Shop", "restaurant_id" : "40356443" }
(" id" : 0bjectId("6166f99585e220651a03be221"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356498" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356498" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356498" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356498" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356049" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356049" }
(" id" : 0bjectId("6166f99585e22051a03be222"), "borough" : "Rooklyn", "cuisine" : "Ice Cream, Gelato, Vogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "4036076" }
(" id" : 0bjectId("6166f99585e220651a03be222"), "borough" : "Rooklyn", "cuisine" : "Jewish/Kosher", "name" : "Nordio Delicaters", "nestaurant_id" : "40361322" }
(" id" : 0bjectId("6166f99585e220651a03be222"), "borough" : "Rooklyn", "cuisine" : "Pelicatessen", "name" : "Nordio Delicatersunant_id" : "40361322" }
(" id" : 0bjectId("6166f99585e220651a03be222"), "borough" : "Rooklyn",
```

4.

```
},
"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("6106f99585e29051a03be224"),
"address" : {
    "building": "2300",
    "coord" : [
```

}

```
-73.8786113,
        40.8502883
    ],
    "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"
     db. addresses. find (\{borough: "Bronx"\}). limit (5). pretty ()\\
"\_id": ObjectId ("6106f99585e29051a03be21f"),\\
"address" : {
    "building" : "1007",
    "coord" : [
        -73.856077,
        40.848447
```

}

{

```
],
                            "street": "Morris Park Ave",
                            "zipcode" : "10462"
              },
               "borough" : "Bronx",
               "cuisine" : "Bakery",
               "grades" : [
                            {
                                           "date": ISODate("2014-03-03T00:00:00Z"),
                                           "grade": "A",
                                           "score" : 2
                            },
                            {
                                           "date": ISODate("2013-09-11T00:00:00Z"),
                                           "grade" : "A",
                                           "score" : 6
                            },
                            {
                                           "date": ISODate("2013-01-24T00:00:00Z"),
                                            "grade" : "A",
                                           "score" : 10
                            },
                            {
                                           "date": ISODate("2011-11-23T00:00:00Z"),
                                            "grade" : "A",
                                           "score" : 9
                            },
                            {
                                           "date": ISODate("2011-03-10T00:00:00Z"),
                                            "grade" : "B",
                                           "score" : 14
                                7.
                                db.addresses.find({borough: "Bronx"}).skip(5).limit(5).pretty()
                                8.
                                                  db. addresses. find (\{grades: \{\$elemMatch: \{"score": \{\$gt: 90\}\}\}\}). pretty()
                                9.
                                                  db.addresses.find({grades: { $elemMatch:{"score":{$gt:80, $lt:100}}}});
 \{ "\_id" : ObjectId ("6106f99585e29051a03be41e"), "address" : \{ "building" : "345", "coord" : [ -73.9864626, 40.7266739 ], "street" : "East 6 for the context of the cont
```

```
Street", "zipcode": "10003" }, "borough": "Manhattan", "cuisine": "Indian", "grades": [ { "date": ISODate("2014-09-15T00:00:002"),
 "grade": "A", "score": 5 }, { "date": ISODate("2014-01-14T00:00:00Z"), "grade": "A", "score": 8 }, { "date": ISODate("2013-
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("6106f99585e29051a03be57d"), "address" : { "building" : "130", "coord" : [ -73.984758, 40.7457939 ], "street" :
 "Madison Avenue", "zipcode": "10016" }, "borough": "Manhattan", "cuisine": "Pizza/Italian", "grades": [ { "date": ISODate("2014-
1224T00:00:002"), "grade": "Z", "score": 31 }, { "date": ISODate("2014-06-17T00:00:002"), "grade": "C", "score": 98 }, { "date": 98 }, { "
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" }
{ "_id" : ObjectId("6106f99685e29051a03bede8"), "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": "C", "score": 89 }, { "date": ISODate("2013-06-06T00:00:00Z"), "grade": "A", "score": 6 }, { "date": ISODate("2012-
0619T00:00:00Z"), "grade": "A", "score": 13 }], "name": "West 79Th Street Boat Basin Cafe", "restaurant_id": "40756344"}
                            10.
                                            db.addresses.find({"address.coord": {$lt:-95.754168}});
 \{ "\_id" : ObjectId ("6106f99685e29051a03be863"), "address" : \{ "building" : "3707", "coord" : [ -101.8945214, 33.5197474 ], "street" : "824869051a03be863" ], "address" : \{ "building" : "3707", "coord" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : \{ "building" : "3707", "coord" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : "824969051a03be863" ], "address" : [ -101.8945214, 33.5197474 ], "street" : [ -101.8945214, 33.519474 ], "street" : [ -101.894744 ], "street" : [ -101.894744 ], "street" : [ 
Street", "zipcode" : "11372" }, "borough" : "Queens", "cuisine" : "American ", "grades" : [ { "date" : ISODate("2014-06-04T00:00:00Z"),
 "grade": "A", "score": 12 }, { "date": ISODate("2013-11-07T00:00:00Z"), "grade": "B", "score": 19 }, { "date": ISODate("2013-
0517T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2012-08-29T00:00:00Z"), "grade": "A", "score": 11 }, { "date": ISODate("2012-08-29T00:00Z"), "grade": 
ISODate("2012-04-03T00:00:002"), "grade": "A", "score": 12 }, { "date": ISODate("2011-11-16T00:00:002"), "grade": "A", "score": 7 } ],
 "name" : "Burger King", "restaurant_id" : "40534067" }
              11. db.addresses.find( {$and:
{"cuisine":{$ne:"American"}},
{"grades.score":{$gt:70}},
{"address.coord":{$It :-65.754168}}
           );
              12. db.addresses.find(
"cuisine":{$ne:"American"},
 "grades.score":{$gt:70},
"address.coord":{$It :-65.754168}
              13. db.addresses.find({$and:[{"cuisine" : {$ne :"American "}},{"grades.grade" : "A"},{"borough" : {$ne
                              :"Brooklyn "}}]}).sort({"cuisine":-1}).pretty()
```

13.

```
it" for more
ddresses.find({$and:[{"cuisine" : {$ne :"American "}},{"grades.grade" : "A"},{"borough" : {$ne :"Brooklyn "}}]}).sort({"cuisine":-1}).pretty()
                            "building" : "89",
                                         : [
-73.9995899,
40.7168015
                           ],
"street" : "Baxter Street",
"zipcode" : "10013"
                       ugh" : "Manhattan",
ine" : "Vietnamese/Cambodian/Malaysia",
                                          "grade" : "A",
"score" : 13
                                          "date" : ISODate("2013-08-31T00:00:00Z"),
                                          "grade" : "A",
"score" : 13
                                          "date" : ISODate("2013-04-11T00:00:00Z"),
                                          "date" : ISODate("2012-10-17T00:00:00Z"),
                                                                                                                                                              14. db.addresses.find( {name: /^Wil/}, { "restaurant_id" : 1, "name":1, "borough":1, "cuisine" :1 } )
{ "_id" : ObjectId("6106f99585e29051a03be224"), "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia", "restaurant_id" :
"40357217" }
{ "_id" : ObjectId("6106f99585e29051a03be23e"), "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilken'S Fine Food",
"restaurant id": "40356483" }
{ "_id" : ObjectId("6106f99685e29051a03bf02e"), "borough" : "Bronx", "cuisine" : "Pizza", "name" : "Wilbel Pizza", "restaurant_id" :
 "40871979" }
                   15.
db.addresses.find( {name: /ces$/}, { "restaurant_id" : 1, "name":1, "borough":1, "cuisine" :1 } )
{ "_id" : ObjectId("6106f99685e29051a03be6ae"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Pieces", "restaurant_id" :
"40399910" }
{ "id": ObjectId("6106f99685e29051a03be770"), "borough": "Queens", "cuisine": "American ", "name": "S.M.R Restaurant Services",
 "restaurant id": "40403857" }
{ "_id" : ObjectId("6106f99685e29051a03be775"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Good Shepherd Services",
 "restaurant id": "40403989" }
{ "_id" : ObjectId("6106f99685e29051a03bec20"), "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "The Ice
Box-Ralph'S Famous Italian Ices", "restaurant_id": "40690899"}
{ "id": ObjectId("6106f99685e29051a03bee2b"), "borough": "Brooklyn", "cuisine": "Jewish/Kosher", "name": "Alices", "restaurant id":
"40782042" }
 \{ "\_id" : ObjectId ("6106f99685e29051a03bf046"), "borough" : "Manhattan", "cuisine" : "American", "name" : "Re: Sources", "Manhattan", "cuisine" : "American : 
"restaurant_id" : "40876068" }
db.addresses.find( {name: /.*Reg*./}, { "restaurant_id": 1, "name":1, "borough":1, "cuisine":1 })
{ "_id" : ObjectId("6106f99585e29051a03be222"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers",
"restaurant_id" : "40356649" }
```

```
{ "_id" : ObjectId("6106f99585e29051a03be234"), "borough" : "Queens", "cuisine" : "Chinese", "name" : "Ho Mei Restaurant",
 "restaurant id": "40362432" }
{ "_id" : ObjectId("6106f99585e29051a03be237"), "borough" : "Brooklyn", "cuisine" : "Caribbean", "name" : "Shashemene Int'L Restaura",
 "restaurant id": "40362869" }
{ "_id" : ObjectId("6106f99585e29051a03be238"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And
Restaurant", "restaurant_id": "30191841" }
{ "_id" : ObjectId("6106f99585e29051a03be259"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Palm Restaurant",
 "restaurant_id" : "40364355" }
{ "_id" : ObjectId("6106f99585e29051a03be25a"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Old Town Bar &
Restaurant", "restaurant_id": "40364389" }
{ "_id" : ObjectId("6106f99585e29051a03be25b"), "borough" : "Manhattan", "cuisine" : "Italian", "name" : "Isle Of Capri Resturant",
 "restaurant_id" : "40364373" }
{ "_id" : ObjectId("6106f99585e29051a03be260"), "borough" : "Manhattan", "cuisine" : "Latin (Cuban, Dominican, Puerto Rican, South &
Central American)", "name": "Seville Restaurant", "restaurant_id": "40364439" }
{ "_id" : ObjectId("6106f99585e29051a03be263"), "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Ben-Best Deli &
Restaurant", "restaurant_id": "40364529" }
{ "_id" : ObjectId("6106f99585e29051a03be268"), "borough" : "Manhattan", "cuisine" : "Italian", "name" : "Marchis Restaurant",
 "restaurant_id" : "40364668" }
{ "_id" : ObjectId("6106f99585e29051a03be26f"), "borough" : "Queens", "cuisine" : "Pizza/Italian", "name" : "New Park Pizzeria &
Restaurant", "restaurant_id": "40364744" }
{ "_id" : ObjectId("6106f99585e29051a03be278"), "borough" : "Manhattan", "cuisine" : "Italian", "name" : "Forlinis Restaurant",
 "restaurant id": "40365098" }
{ "_id" : ObjectId("6106f99585e29051a03be279"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dorrian'S Red Hand Restaurant",
 "restaurant_id" : "40365239" }
{" id": ObjectId("6106f99585e29051a03be27f"), "borough": "Manhattan", "cuisine": "American ", "name": "Keats Restaurant",
 "restaurant id": "40365288" }
{ "_id" : ObjectId("6106f99585e29051a03be287"), "borough" : "Manhattan", "cuisine" : "Spanish", "name" : "Spain Restaurant & Bar",
 "restaurant id": "40365472" }
{ "_id" : ObjectId("6106f99585e29051a03be288"), "borough" : "Manhattan", "cuisine" : "American ", "name" : "Reynold'S Bar",
 "restaurant_id": "40365423" }
{ "_id" : ObjectId("6106f99585e29051a03be28d"), "borough" : "Manhattan", "cuisine" : "Italian", "name" : "V & T Restaurant",
 "restaurant id": "40365577" }
 \{ "\_id" : ObjectId ("6106f99585e29051a03be28e"), "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Reben Luncheonette", name" : "Reben Luncheonette", name : "Reben Luncheonette", nam
 "restaurant_id": "40365546" }
{ "_id" : ObjectId("6106f99585e29051a03be291"), "borough" : "Queens", "cuisine" : "Chinese", "name" : "King Yum Restaurant",
 "restaurant id": "40365592" }
{ "_id" : ObjectId("6106f99585e29051a03be292"), "borough" : "Queens", "cuisine" : "American ", "name" : "Jahn'S Restaurant",
 "restaurant_id" : "40365627" }
                   17.
db.addresses.find( {borough: "Bronx", $or:[{cuisine: "Chinese"}, {cuisine: "American"}]})
{ "_id" : ObjectId("6106f99585e29051a03be240"), "address" : { "building" : "1236", "coord" : [ -73.8893654, 40.81376179999999 ], "street"
 : "238 Spofford Ave", "zipcode" : "10474" }, "borough" : "Bronx", "cuisine" : "Chinese", "grades" : [ { "date" : ISODate("2013-
1230T00:00:00Z"), "grade" : "A", "score" : 8 }, { "date" : ISODate("2013-01-08T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" :
ISODate("2012-06-12T00:00:002"), "grade" : "B", "score" : 15 } ], "name" : "Happy Garden", "restaurant_id" : "40363289" }
{ "_id" : ObjectId("6106f99585e29051a03be252"), "address" : { "building" : "277", "coord" : [ -73.8941893, 40.8634684 ], "street" : "East
Kingsbridge Road", "zipcode": "10458" }, "borough": "Bronx", "cuisine": "Chinese", "grades": [ { "date": ISODate("2014-
0303T00:00:002"), "grade": "A", "score": 10 }, { "date": ISODate("2013-09-26T00:00:002"), "grade": ISODate("2013-09-26T00:00:002"), "grade": ISODate("2013-09-26T00:000:002"), "grade": ISODate("2013-09-26T00:000"), "grade": ISODate("2013-09-26T00:000"), "grade": ISODate("2013-09-26T00:000"), "grade": ISODate("2013-09-26T00:000"), "grade": ISODate("2013-09-200"), "grade": ISODate("2013-09-200
```

```
ISODate("2013-03-19T00:00:002"), "grade": "A", "score": 10 }, { "date": ISODate("2012-08-29T00:00:002"), "grade": "A", "score": 11 }, {
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The Tropics Ice Cream", "restaurant id": "40356731" }
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Ice Cream", "restaurant_id" : "40360076" }
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{ "_id" : ObjectId("6106f99585e29051a03be231"), "borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Taste
The Tropics Ice Cream", "restaurant_id": "40356731" }
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Type "it" for more
                       22.
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"score": 11 }, { "date": ISODate("2011-11-23T00:00:00Z"), "grade": "A", "score": 9 } ], "name": "Marino'S Pizza & Restaurant",
"restaurant_id" : "40560917" }
{ "_id" : ObjectId("6106f99685e29051a03beae6"), "grades" : [ { "date" : ISODate("2015-01-05T00:00:002"), "grade" : "A", "score" : 9 }, {
"date" : ISODate("2014-08-11T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2014-03-04T00:00:00Z"), "grade" : "B", "score"
: 22 }, { "date" : ISODate("2013-09-13T00:00:00Z"), "grade" : "A", "score" : 5 }, { "date" : ISODate("2013-01-16T00:00:00Z"), "grade" : "A",
"score" : 11 } ], "name" : "Gene'S Coffee Shop", "restaurant_id" : "40614916" }
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7 }, { "date" : ISODate("2013-03-29T00:00:00Z"), "grade" : "A", "score" : 10 }, { "date" : ISODate("2012-03-07T00:00:00Z"), "grade" : "A",
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db. addresses. find (\{"grades. 1. date": ISODate ("2014-08-11T00:00:00Z"), "grades. 1. grade": "A" , "grades. 1. score": 9\}, ("restaurant_id": 1. grades. 1. grades
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1,"name":1,"grades":1});

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db.addresses.find({"address.coord.1":{$gt:42, $lte:52}},{"restaurant_id":1,"name":1,"coord":1});
{ "__id" : ObjectId("6106f99585e29051a03be4ba"), "name" : "T.G.I. Friday'S", "restaurant_id" : "40387990" }
{ "_id" : ObjectId("6106f99585e29051a03be4eb"), "name" : "T.G.I. Fridays", "restaurant_id" : "40388936" }
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 \{ "\_id" : ObjectId ("6106f99685e29051a03be97f"), "name" : "La Caridad 78", "restaurant\_id" : "40568285" \} \\
{ "_id" : ObjectId("6106f99685e29051a03bf04b"), "name" : "Bijan'S", "restaurant_id" : "40876618" }
{ "_id" : ObjectId("6106f99685e29051a03bf060"), "name" : "Hyatt, Ny Central/Room Service", "restaurant_id" : "40879243" } { "_id" :
ObjectId("6106f99685e29051a03bf075"), "name" : "Sports Center At Chelsea Piers (Sushi Bar)", "restaurant_id" : "40882356" }
         25
db.addresses.find().sort({"name":1})
         26.
db.addresses.find().sort({"name":-1})
         27.
db.addresses.find().sort({"cuisine":1,"borough":-1})
db.addresses.find({"address.street": {$exists:true}});
db.addresses.find({"address.coord": {$type:1}})
db.addresses.find({ "grades.score": { $mod : [7, 0]}},{"restaurant_id" :1, "name":1, "grades": 1})
         31 db.addresses.find(
             { name :
      { $regex : "mon.*", $options: "i" }
      },
         {
                 "name":1,
                 "borough":1,
                 "address.coord":1,
          "cuisine" :1
      }
     );
         \label{lem:db.addresses.find({name:/.*mon.*/}, {"name":1,"borough":1, "address.coord":1, "cuisine":1});} \\
```

32

```
db.addresses.find(
                                             { name :
                                                 { $regex : /^Mad/i, }
                                             },
                                                              "name":1,
                                                              "borough":1,
                                                              "address.coord":1,
                                                              "cuisine":1
                                                          }
                                             );
db.addresses.find({ name : /^Mad/}, {"name":1,"borough":1, "address.coord":1, "cuisine" :1});
{ "_id" : ObjectId("6106f99685e29051a03be762"), "address" : { "coord" : [ -73.9860597, 40.7431194 ] }, "borough" : "Manhattan",
  "cuisine": "American", "name": "Madison Square" }
{ "_id" : ObjectId("6106f99685e29051a03be826"), "address" : { "coord" : [ -73.9830219999999, 40.742313 ] }, "borough" : "Manhattan",
  "cuisine" : "Indian", "name" : "Madras Mahal" }
{ "_id" : ObjectId("6106f99685e29051a03bead8"), "address" : { "coord" : [ -74.000002, 40.72735 ] }, "borough" : "Manhattan", "cuisine" :
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{"\_id": ObjectId("6106f99685e29051a03beb87"), "address": {"coord": [-73.9817195999999, 40.7499406]}, "borough": "Manhattan", full of the content of the co
 "cuisine": "French", "name": "Madison Bistro" }
{ "_id" : ObjectId("6106f99685e29051a03bec0a"), "address" : { "coord" : [ -73.9717845, 40.6897199 ] }, "borough" : "Brooklyn", "cuisine" :
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 : "Hotdogs", "name" : "Madame Tussaud'S" }
{ "_id" : ObjectId("6106f99685e29051a03befc8"), "address" : { "coord" : [ -73.95623719999999, 40.7761697 ] }, "borough" : "Manhattan",
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