

Assignment 1

```
cmd Select C:\Windows\System32\cmd.exe - mongo
For installation instructions, see
https://docs.mongodb.com/mongodb-shell/install/
=====
The server generated these startup warnings when booting:
2021-07-30T09:18:10.638+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
...
...
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).
The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.
To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
...
> use mongo_practice
switched to db mongo_practice
> db.createCollection("movies");
{ "ok" : 1 }
> db.movies.insert({ "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": ["Brad Pitt", "Edward Norton"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": ["John Travolta", "Uma Thurman"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": ["John Travolta", "Uma Thurman"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Inglourious Basterds", "Writer": "Quentin Tarantino", "year": "2009", "actors": ["Brad Pitt", "Diane Kruger", "Eli Roth"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: An Unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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" });
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:59
> db.movies.insert({ "title": "Pee Wee Herman's Big Adventure" })
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Avatar" });
WriteResult({ "nInserted" : 1 })
  
```

```
cmd Select C:\Windows\System32\cmd.exe - mongo
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...
> use mongo_practice
switched to db mongo_practice
> db.createCollection("movies");
{ "ok" : 1 }
> db.movies.insert({ "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": ["Brad Pitt", "Edward Norton"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": ["John Travolta", "Uma Thurman"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": ["John Travolta", "Uma Thurman"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Inglourious Basterds", "Writer": "Quentin Tarantino", "year": "2009", "actors": ["Brad Pitt", "Diane Kruger", "Eli Roth"] });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: An Unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" });
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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" });
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:59
> db.movies.insert({ "title": "Pee Wee Herman's Big Adventure" })
WriteResult({ "nInserted" : 1 })
> db.movies.insert({ "title": "Avatar" });
WriteResult({ "nInserted" : 1 })
> db.movies.find()
[{"_id": ObjectId("61045033274a7b4794e15340"), "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": [ "Brad Pitt", "Edward Norton" ] }, {"_id": ObjectId("610450cf274a7b4794e15341"), "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] }, {"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quentin Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] }, {"_id": ObjectId("610451dd274a7b4794e15343"), "title": "Inglourious Basterds", "Writer": "Quentin Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] }, {"_id": ObjectId("610452a0274a7b4794e15344"), "title": "The Hobbit: An Unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" }, {"_id": ObjectId("610452ef274a7b4794e15345"), "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" }, {"_id": ObjectId("610453c6274a7b4794e15346"), "title": "The Hobbit: The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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("610453f9274a7b4794e15347"), "title": "Pee Wee Herman's Big Adventure" }, {"_id": ObjectId("6104540e274a7b4794e15348"), "title": "Avatar" }]
C:\Windows\System32\cmd.exe - mongo
  
```

```
C:\Windows\System32\cmd.exe - mongo
> show dbs
admin          0.000GB
config         0.000GB
local          0.000GB
mongo_practice 0.000GB
users          0.000GB
> use mongo_practice;
switched to db mongo_practice
> db.movies.find();
[{"_id": ObjectId("61045033274a7b4794e15340"), "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": [ "Brad Pitt", "Edward Norton" ] },
 {"_id": ObjectId("610450cf274a7b4794e15341"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("610451dd274a7b4794e15343"), "title": "Inglourious Basterds", "Writer": "Quenton Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] },
 {"_id": ObjectId("610452a0274a7b4794e15344"), "title": "The Hobbit:An unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" },
 {"_id": ObjectId("610452ef274a7b4794e15345"), "title": "The Hobbit:The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" },
 {"_id": ObjectId("610453c6274a7b4794e15346"), "title": "The Hobbit:The Battle of the Five Armies", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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("610453f9274a7b4794e15347"), "title": "Pee Wee Herman's Big Adventure" },
 {"_id": ObjectId("6104540e274a7b4794e15348"), "title": "Avatar" }
> db.movies.findOne(writer: "Quentin Tarantino")
caught exception: SyntaxError: missing ) after argument list
@(shell):1:24
> db.movies.findOne(writer: "Quentin Tarantino");
caught exception: SyntaxError: missing ) after argument list
@(shell):1:24
> db.movies.findOne(writer: "Quentin Tarantino");
null
> db.movies.findOne({"writer": "Quentin Tarantino"});
null
> db.movies.findOne({"writer": "Quentin Tarantino"})
null
> db.movies.find({"writer": "Quentin Tarantino"});
> db.movies.find({"writer": "Quentin Tarantino"});
> db.movies.find({"writer": "Quentin Tarantino"});
[{"_id": ObjectId("610450cf274a7b4794e15341"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("610451dd274a7b4794e15343"), "title": "Inglourious Basterds", "Writer": "Quenton Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] },
 {"_id": ObjectId("610452a0274a7b4794e15344"), "title": "The Hobbit:An unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" },
 {"_id": ObjectId("610452ef274a7b4794e15345"), "title": "The Hobbit:The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" },
 {"_id": ObjectId("610453c6274a7b4794e15346"), "title": "The Hobbit:The Battle of the Five Armies", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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("610453f9274a7b4794e15347"), "title": "Pee Wee Herman's Big Adventure" },
 {"_id": ObjectId("6104540e274a7b4794e15348"), "title": "Avatar" }
9:16 PM 31-Jul-21
```

```
C:\Windows\System32\cmd.exe - mongo
[{"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("610451dd274a7b4794e15343"), "title": "Inglourious Basterds", "Writer": "Quenton Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] },
 > db.movies.find({"actions": "Brad Pitt"});
[{"_id": ObjectId("61045033274a7b4794e15340"), "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": [ "Brad Pitt", "Edward Norton" ] },
 {"_id": ObjectId("610452a0274a7b4794e15341"), "title": "Inglourious Basterds", "Writer": "Quenton Tarantino", "year": "2009", "actors": [ "Brad Pitt", "Diane Kruger", "Eli Roth" ] },
 > db.movies.find("franchise": "The Hobbit");
[{"_id": ObjectId("610452a0274a7b4794e15344"), "title": "The Hobbit:An unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" },
 {"_id": ObjectId("610452ef274a7b4794e15345"), "title": "The Hobbit:The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" },
 {"_id": ObjectId("610453c6274a7b4794e15346"), "title": "The Hobbit:The Battle of the Five Armies", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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({$and: [{year: {$gt: 1900}}, {year: {$lt: 2000}}]});
> db.movies.find({$and: [{year: {$gt: "1900"}}, {year: {$lt: "2000"}}]});
[{"_id": ObjectId("61045033274a7b4794e15340"), "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": [ "Brad Pitt", "Edward Norton" ] },
 {"_id": ObjectId("610450cf274a7b4794e15341"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 > db.movies.find({$or:[{"year":{$lt: "2000"}}, {"year":{$gt: "2010"}}]});
[{"_id": ObjectId("61045033274a7b4794e15340"), "title": "Fight Club", "Writer": "Chuck Palahniuk", "year": "1999", "actors": [ "Brad Pitt", "Edward Norton" ] },
 {"_id": ObjectId("610450cf274a7b4794e15341"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("61045136274a7b4794e15342"), "title": "Pulp Fiction", "Writer": "Quenton Tarantino", "year": "1994", "actors": [ "John Travolta", "Uma Thurman" ] },
 {"_id": ObjectId("610452a0274a7b4794e15344"), "title": "The Hobbit:An unexpected Journey", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit" },
 {"_id": ObjectId("610452ef274a7b4794e15345"), "title": "The Hobbit:The Desolation of Smaug", "Writer": "J.R.R Tolkein", "year": "2013", "franchise": "The Hobbit" },
 {"_id": ObjectId("610453c6274a7b4794e15346"), "title": "The Hobbit:The Battle of the Five Armies", "Writer": "J.R.R Tolkein", "year": "2012", "franchise": "The Hobbit", "synopsis": "Bilbo abd 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" }
>
```

```
C:\Windows\System32\cmd.exe - mongo
> db.movies.update({"title": "The Hobbit: An Unexpected Journey"}, {"synopsis": "A reluctant hobbit, Bilbo Baggins, sets out to the Lonely Mountain with a spirited 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": "The Desolation of Smaug"}, {"synopsis": "The dwarves, along with Bilbo Baggins and Gandalf the Grey, continue their quest to reclaim Erebor, their homeland, from Smaug. Bilbo Baggins is in possession of a mysterious and magical ring."});
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
> db.movies.update({"title": "Pulp Fiction"}, {"$push: {actors: "Samuel L. Jackson"}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.movies.find({$text: {$search: "Bilbo"}});
Error: error: {
    "ok" : 0,
    "errmsg" : "text index required for $text query",
    "code" : 27,
    "codeName" : "IndexNotFound"
}
> db.movies.find({$text: {$search: "Bilbo"}});
uncaught exception: SyntaxError: missing : after property id:
@shell):1:17
> db.movies.find({synopsis:/Bilbo/g}).pretty();
{
    "_id" : ObjectId("610453c6274a7b4794e15346"),
    "title" : "The Hobbit: The Desolation of Smaug",
    "Writer" : "J.R.R Tolkein",
    "year" : "2012",
    "franchise" : "The Hobbit",
    "synopsis" : "Bilbo and Company are forced to engage in a war against an array of combatants and keep the Lonely Mountain from falling into the hands of a rising darkness"
}
> db.movies.find({synopsis:/Gandalf/g}).pretty();
> db.movies.find({$and:[{"synopsis":/Bilbo/g}, {"synopsis":{$not:/Gandalf/g}}]}).pretty();
{
    "_id" : ObjectId("610453c6274a7b4794e15346"),
    "title" : "The Hobbit: The Desolation of Smaug",
    "Writer" : "J.R.R Tolkein",
    "year" : "2012",
    "franchise" : "The Hobbit",
    "synopsis" : "Bilbo 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({synopsis:"/(dwarves|hobbit)/g").pretty()};
> db.movies.find({synopsis:"/(dwarves|Hobbit)/g").pretty()};
> db.movies.find({synopsis:"/(gold.*dragon|dragon.*gold)/g").pretty();
>
```

```
C:\Windows\System32\cmd.exe - mongo
@(shell):1:61
> db.posts.insertMany([
... {
... "username": "GoodGuyGreg",
... "title": "Passes out as party",
... "body": "Wakes up early and cleans house"
... },
... {
... "username": "GoodGuyGrey",
... "title": "Steals your identity",
... "body": "Raises your credit score"
... },
... {
... "username": "GoodGuyGreg",
... "title": "Reports a bug in your code",
... "body": "Sends you a Pull Request"
... },
... {
... "username": "GoodGuyGrey",
... "title": "Borrows something",
... "body": "Sells it"
... },
... {
... "username": "ScumbagSteve",
... "title": "Borrows something",
... "body": "Sells it"
... },
... {
... "username": "ScumbagSteve",
... "title": "Borrows Everything",
... "body": "The end"
... },
... {
... "username": "SCumbagSteve",
... "title": "Forks your repo on github",
... "body": "Sets to private"
... }
])
uncaught exception: SyntaxError: '' literal not terminated before end of script :
@(shell):15:33
> db.posts.insertMany([
... {
... "username": "GoodGuyGreg",
... "title": "Passes out as party",
... "body": "Wakes up early and cleans house"
... },
... {
... "username": "GoodGuyGrey",
... "title": "Steals your identity",
... "body": "Raises your credit score"
... },
... {
... "username": "GoodGuyGreg",
... "title": "Reports a bug in your code",
... "body": "Sends you a Pull Request"
... },
... {
... "username": "GoodGuyGrey",
... "title": "Borrows something",
... "body": "Sells it"
... },
... {
... "username": "ScumbagSteve",
... "title": "Borrows something",
... "body": "Sells it"
... },
... {
... "username": "ScumbagSteve",
... "title": "Borrows everything",
... "body": "The end"
... },
... {
... "username": "SCumbagSteve",
... "title": "Forks your repo on github",
... "body": "Sets to private"
... }
])
uncaught exception: SyntaxError: missing } after property list :
@(shell):1:410
> db.posts.insert({
... "username": "GoodGuyGreg",
... "title": "Passes out at party",
... "body": "Wakes up early and cleans house"
... });
WriteResult({ "nInserted" : 1 })
> db.posts.insert({
... "username": "GoodGuyGreg",
... "title": "Steals your identity",
... "body": "Raises your credit score"
... });
WriteResult({ "nInserted" : 1 })
> db.posts.insert({
... "username": "GoodGuyGreg",
... "title": "Reports a bug in your code",
... "body": "Sends you a Pull Request"
... });
WriteResult({ "nInserted" : 1 })
> db.posts.insert({
... "username": "GoodGuyGrey",
... "title": "Borrows something",
... "body": "Sells it"
... });
WriteResult({ "nInserted" : 1 })
> db.posts.insert({
... "username": "ScumbagSteve",
... "title": "Borrows everything",
... "body": "The end"
... });
WriteResult({ "nInserted" : 1 })
> db.posts.insert({
... "username": "SCumbagSteve",
... "title": "Forks your repo on github",
... "body": "Sets to private"
... });
WriteResult({ "nInserted" : 1 })
> db.comments.insert({
... "username": "GoodGuyGreg",
... "comment": "Hope you got a good deal",
... "post": ObjectId("5f44d3a148197d7749864def")
... });
uncaught exception: SyntaxError: '' literal not terminated before end of script :
@(shell):1:129
>
```

```
C:\Windows\System32\cmd.exe - mongo
is your identity", "body": "Raises your credit score" }, { "username": "GoodGuyGreg", "title": "Reports a bug in your code", "body": "Sends you a Pull Request"}, {"username": "ScumbagSteve", "title": "Borrows something", "body": "Sells it"}, {"username": "ScumbagSteve", "title": "Borrows Everything", "body": "The end"}, {"username": "SCumbagSteve", "title": "Forks your repo on github", "body": "Sets to private"}];
uncaught exception: SyntaxError: missing } after property list :
@shell):1:410
> db.posts.insert({ "username": "GoodGuyGreg", "title": "Passes out at party", "body": "Wakes up early and cleans house" });
WriteResult({ "Inserted" : 1 })
> db.posts.insert({ "username": "GoodGuyGreg", "title": "Steals your identity", "body": "Raises your credit score" });
WriteResult({ "Inserted" : 1 })
> db.posts.insert({ "username": "GoodGuyGreg", "title": "Reports a bug in your code", "body": "Sends you a Pull Request" });
WriteResult({ "Inserted" : 1 })
> db.posts.insert({ "username": "ScumbagSteve", "title": "Borrows something", "body": "Sells it" });
WriteResult({ "Inserted" : 1 })
> db.posts.insert({ "username": "ScumbagSteve", "title": "Borrows everything", "body": "The end" });
WriteResult({ "Inserted" : 1 })
> db.posts.insert({ "username": "ScumbagSteve", "title": "Forks your repo on github", "body": "Sets to private" });
WriteResult({ "Inserted" : 1 })
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal", "post": ObjectId("5f44d3a148197d7749864def") });
...
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal", "post": ObjectId("5f44d3a148197d7749864def") });
uncaught exception: SyntaxError: '}' literal not terminated before end of script :
@shell):1:129
> db.users.find()
use users;
switched to db users
> db.users.find()
{
  "_id" : ObjectId("6106e5f0728459cab355ab2"), "username" : "GoodGuyGreg", "first_name" : "Good Guy", "last_name" : "Greg"
  "_id" : ObjectId("6106e5f0728459cab355ab3"), "username" : "ScumbagSteve", "full_name" : { "first" : "Scumbag", "last" : "steve" }
}
use posts;
switched to db posts
> db.posts.find();
{
  "_id" : ObjectId("6106eb40728459cab355ab4"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house"
  "_id" : ObjectId("6106eb970728459cab355ab5"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score"
  "_id" : ObjectId("6106ebc40728459cab355ab6"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a Pull Request"
  "_id" : ObjectId("6106ec000728459cab355ab7"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it"
  "_id" : ObjectId("6106ec250728459cab355ab8"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end"
  "_id" : ObjectId("6106ec440728459cab355ab9"), "username" : "ScumbagSteve", "title" : "Forks your repo on github", "body" : "Sets to private"
}
db.posts.find({ "username": "GoodGuyGreg" });
{
  "_id" : ObjectId("6106eb400728459cab355ab4"), "username" : "GoodGuyGreg", "title" : "Passes out at party", "body" : "Wakes up early and cleans house"
  "_id" : ObjectId("6106eb970728459cab355ab5"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score"
  "_id" : ObjectId("6106ebc40728459cab355ab6"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a Pull Request"
}
> db.comments.find({ "username": "GoodGuyGreg" });
...

```

```
C:\Windows\System32\cmd.exe - mongo
{
  "_id" : ObjectId("6106eb970728459cab355ab5"), "username" : "GoodGuyGreg", "title" : "Steals your identity", "body" : "Raises your credit score"
  "_id" : ObjectId("6106ebc40728459cab355ab6"), "username" : "GoodGuyGreg", "title" : "Reports a bug in your code", "body" : "Sends you a Pull Request"
}
db.posts.find({ "username": "ScumbagSteve" });
{
  "_id" : ObjectId("6106ec000728459cab355ab7"), "username" : "ScumbagSteve", "title" : "Borrows something", "body" : "Sells it"
  "_id" : ObjectId("6106ec250728459cab355ab8"), "username" : "ScumbagSteve", "title" : "Borrows everything", "body" : "The end"
  "_id" : ObjectId("6106ec440728459cab355ab9"), "username" : "ScumbagSteve", "title" : "Forks your repo on github", "body" : "Sets to private"
}
use comments;
switched to db comments
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8") });
...
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8") });
uncaught exception: SyntaxError: missing exponent :
@shell):1:100
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8") });
...
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8") });
WriteResult({ "Inserted" : 1 })
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "What's mine is yours!", "post": ObjectId("6106ec250728459cab355ab9") });
uncaught exception: SyntaxError: missing } after property list :
@shell):1:79
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "What's mine is yours!", "post": ObjectId("6106ec250728459cab355ab8") });
WriteResult({ "Inserted" : 1 })
> db.comments.insert({ "username": "GoodGuyGreg", "comment": "Don't violate the licensing agreement!", "post": ObjectId("6106ec250728459cab355ab9") });
WriteResult({ "Inserted" : 1 })
> db.comments.insert({ "username": "ScumbagSteve", "comment": "It still isn't clean", "post": ObjectId("6106ec250728459cab355ab4") });
WriteResult({ "Inserted" : 1 })
> db.comments.insert({ "username": "ScumbagSteve", "comment": "Denied your PR cause I found a hack", "post": ObjectId("6106ec250728459cab355ab6") });
WriteResult({ "Inserted" : 1 })
> db.comments.find();
{
  "_id" : ObjectId("6106fa70728459cab355aba"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal!", "post" : ObjectId("6106ec250728459cab355ab8")
  "_id" : ObjectId("6106feff0728459cab355abb"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "post" : ObjectId("6106ec250728459cab355ab8")
  "_id" : ObjectId("6106fb7d0728459cab355abc"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("6106ec250728459cab355ab9")
}
{
  "_id" : ObjectId("6106f9550728459cab355abd"), "username" : "ScumbagSteve", "comment" : "It still isn't clean", "post" : ObjectId("6106ec250728459cab355ab4")
  "_id" : ObjectId("6106f9a10728459cab355abe"), "username" : "ScumbagSteve", "comment" : "Denied your PR cause I found a hack", "post" : ObjectId("6106ec250728459cab355ab6")
}
db.comments.find({ "username": "GoodGuyGreg" });
{
  "_id" : ObjectId("6106fa70728459cab355aba"), "username" : "GoodGuyGreg", "comment" : "Hope you got a good deal!", "post" : ObjectId("6106ec250728459cab355ab8")
  "_id" : ObjectId("6106feff0728459cab355abb"), "username" : "GoodGuyGreg", "comment" : "What's mine is yours!", "post" : ObjectId("6106ec250728459cab355ab8")
  "_id" : ObjectId("6106fb7d0728459cab355abc"), "username" : "GoodGuyGreg", "comment" : "Don't violate the licensing agreement!", "post" : ObjectId("6106ec250728459cab355ab9")
}
db.comments.find({ "username": "ScumbagSteve" });

```

```
PS C:\Windows\System32\cmd.exe - mongo
switched to db comments
> db.comments.insert({"username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8")};
...
> db.comments.insert({"username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8")});
uncaught exception: SyntaxError: missing exponent :
@shell:1:100
> db.comments.insert({"username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8")};
...
> db.comments.insert({"username": "GoodGuyGreg", "comment": "Hope you got a good deal!", "post": ObjectId("6106ec250728459cab355ab8")});
writeResult({ "nInserted" : 1 })
> db.comments.insert({"username": "GoodGuyGreg", "comment": "What's mine is yours!", "post": ObjectId("6106ec250728459cab355ab8")});
uncaught exception: SyntaxError: missing ) after property list :
@shell:1:79
> db.comments.insert({"username": "GoodGuyGreg", "comment": "What's mine is yours!", "post": ObjectId("6106ec250728459cab355ab8")});
writeResult({ "nInserted" : 1 })
> db.comments.insert({"username": "GoodGuyGreg", "comment": "Don't violate the licensing agreement!", "post": ObjectId("6106ec250728459cab355ab9")});
writeResult({ "nInserted" : 1 })
> db.comments.insert({"username": "ScumbagSteve", "comment": "It still isn't clean", "post": ObjectId("6106ec250728459cab355ab4")});
writeResult({ "nInserted" : 1 })
> db.comments.insert({ "username": "ScumbagSteve", "comment": "Denied your PR cause I found a hack", "post": ObjectId("6106ec250728459cab355ab6") });
writeResult({ "nInserted" : 1 })
> db.comments.find();
{
  "_id": ObjectId("6106f2a70728459cab355aba"),
  "username": "GoodGuyGreg",
  "comment": "Hope you got a good deal!",
  "post": ObjectId("6106ec250728459cab355ab8")
}
{
  "_id": ObjectId("6106feff0728459cab355abb"),
  "username": "GoodGuyGreg",
  "comment": "What's mine is yours!",
  "post": ObjectId("6106ec250728459cab355ab8")
}
{
  "_id": ObjectId("6106f87d0728459cab355abc"),
  "username": "GoodGuyGreg",
  "comment": "Don't violate the licensing agreement!",
  "post": ObjectId("6106ec250728459cab355ab9")
}
{
  "_id": ObjectId("6106f9550728459cab355abd"),
  "username": "ScumbagSteve",
  "comment": "It still isn't clean",
  "post": ObjectId("6106ec250728459cab355ab4")
}
{
  "_id": ObjectId("6106f9a10728459cab355abe"),
  "username": "ScumbagSteve",
  "comment": "Denied your PR cause I found a hack",
  "post": ObjectId("6106ec250728459cab355ab6")
}
> db.comments.find({ "username": "GoodGuyGreg" });
{
  "_id": ObjectId("6106f2a70728459cab355aba"),
  "username": "GoodGuyGreg",
  "comment": "Hope you got a good deal!",
  "post": ObjectId("6106ec250728459cab355ab8")
}
{
  "_id": ObjectId("6106feff0728459cab355abb"),
  "username": "GoodGuyGreg",
  "comment": "What's mine is yours!",
  "post": ObjectId("6106ec250728459cab355ab8")
}
{
  "_id": ObjectId("6106f87d0728459cab355abc"),
  "username": "GoodGuyGreg",
  "comment": "Don't violate the licensing agreement!",
  "post": ObjectId("6106ec250728459cab355ab9")
}
> db.comments.find({ "username": "ScumbagSteve" });
{
  "_id": ObjectId("6106f9550728459cab355abd"),
  "username": "ScumbagSteve",
  "comment": "It still isn't clean",
  "post": ObjectId("6106ec250728459cab355ab4")
}
{
  "_id": ObjectId("6106f9a10728459cab355abe"),
  "username": "ScumbagSteve",
  "comment": "Denied your PR cause I found a hack",
  "post": ObjectId("6106ec250728459cab355ab6")
}
```

Assignment 2:

```
Microsoft Windows [Version 10.0.18363.1440]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\ACER\Downloads\mongodb-windows-x86_64-5.0.1\mongodb-win32-x86_64-windows-5.0.1\bin>mongoimport --db population --collection zipcodes --file C:\Users\ACER\Downloads\zip.json
2021-08-02T17:08:24.289+0530    connected to: mongodb://localhost/
2021-08-02T17:08:26.065+0530    29353 document(s) imported successfully. 0 document(s) failed to import.

C:\Users\ACER\Downloads\mongodb-windows-x86_64-5.0.1\mongodb-win32-x86_64-windows-5.0.1\bin>
```

1&2)

```
C:\Windows\System32\cmd.exe - mongo
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
> use population;
switched to db population
> db.createCollection("zipcodes");
{
  "ok" : 1
}
> show dbs;
admin          0.000GB
comments       0.000GB
config         0.000GB
local          0.000GB
mongo_practice 0.000GB
population     0.000GB
posts          0.000GB
users          0.000GB
> db.zipcodes.aggregate([{$match:{$and:[{city:"ATLANTA"}, {state:"GA"}]}}])
uncaught exception: SyntaxError: " literal not terminated before end of script :
g(shell):1:71
> db.zipcodes.aggregate([{$match:{$and:[{city:"ATLANTA"}, {state:"GA"}]}}])
{
  "_id" : "30003", "city" : "ATLANTA", "loc" : [ -84.388846, 33.752504 ], "pop" : 1845, "state" : "GA" }
{
  "_id" : "30005", "city" : "ATLANTA", "loc" : [ -84.385145, 33.831963 ], "pop" : 19122, "state" : "GA" }
{
  "_id" : "30006", "city" : "ATLANTA", "loc" : [ -84.351418, 33.786027 ], "pop" : 20081, "state" : "GA" }
{
  "_id" : "30007", "city" : "ATLANTA", "loc" : [ -84.335957, 33.769138 ], "pop" : 16330, "state" : "GA" }
{
  "_id" : "30008", "city" : "ATLANTA", "loc" : [ -84.375744, 33.771839 ], "pop" : 8549, "state" : "GA" }
{
  "_id" : "30009", "city" : "ATLANTA", "loc" : [ -84.388338, 33.798407 ], "pop" : 14766, "state" : "GA" }
{
  "_id" : "30012", "city" : "ATLANTA", "loc" : [ -84.378125, 33.746749 ], "pop" : 17683, "state" : "GA" }
{
  "_id" : "30010", "city" : "ATLANTA", "loc" : [ -84.423173, 33.727849 ], "pop" : 34017, "state" : "GA" }
{
  "_id" : "30011", "city" : "ATLANTA", "loc" : [ -84.470219, 33.722957 ], "pop" : 34880, "state" : "GA" }
{
  "_id" : "30013", "city" : "ATLANTA", "loc" : [ -84.39352, 33.76825 ], "pop" : 8038, "state" : "GA" }
{
  "_id" : "30015", "city" : "ATLANTA", "loc" : [ -84.380771, 33.705062 ], "pop" : 41061, "state" : "GA" }
{
  "_id" : "30014", "city" : "ATLANTA", "loc" : [ -84.425546, 33.756103 ], "pop" : 26649, "state" : "GA" }
{
  "_id" : "30016", "city" : "ATLANTA", "loc" : [ -84.333913, 33.721686 ], "pop" : 34668, "state" : "GA" }
{
  "_id" : "30017", "city" : "ATLANTA", "loc" : [ -84.31685, 33.749788 ], "pop" : 16395, "state" : "GA" }
{
  "_id" : "30018", "city" : "ATLANTA", "loc" : [ -84.445432, 33.786454 ], "pop" : 53894, "state" : "GA" }
{
  "_id" : "30026", "city" : "ATLANTA", "loc" : [ -84.358232, 33.848168 ], "pop" : 125, "state" : "GA" }
{
  "_id" : "30024", "city" : "ATLANTA", "loc" : [ -84.354867, 33.820690 ], "pop" : 15044, "state" : "GA" }
{
  "_id" : "30027", "city" : "ATLANTA", "loc" : [ -84.419966, 33.862723 ], "pop" : 18467, "state" : "GA" }
{
  "_id" : "30019", "city" : "ATLANTA", "loc" : [ -84.335691, 33.868728 ], "pop" : 32158, "state" : "GA" }
{
  "_id" : "30029", "city" : "ATLANTA", "loc" : [ -84.321402, 33.823555 ], "pop" : 17013, "state" : "GA" }
type "it" for more
>
```

5&6)

```
C:\Windows\System32\cmd.exe - mongo
> db.zipcodes.aggregate([ { $group:{_id:"$state",totalpop:{$sum:"$pop"}},{$sort:{pop:1}}}]
{
  "_id" : "MN", "totalpop" : 4372982
}
{
  "_id" : "DE", "totalpop" : 666168
}
{
  "_id" : "AR", "totalpop" : 2350725
}
{
  "_id" : "TX", "totalpop" : 16984601
}
{
  "_id" : "IA", "totalpop" : 2776420
}
{
  "_id" : "ID", "totalpop" : 1006749
}
{
  "_id" : "VI", "totalpop" : 562758
}
{
  "_id" : "WV", "totalpop" : 1793146
}
{
  "_id" : "OR", "totalpop" : 2842321
}
{
  "_id" : "SD", "totalpop" : 695307
}
{
  "_id" : "LA", "totalpop" : 4217595
}
{
  "_id" : "VA", "totalpop" : 6181479
}
{
  "_id" : "MS", "totalpop" : 2573216
}
{
  "_id" : "MI", "totalpop" : 9295297
}
{
  "_id" : "OK", "totalpop" : 3145585
}
{
  "_id" : "NV", "totalpop" : 1201833
}
{
  "_id" : "UT", "totalpop" : 1722859
}
{
  "_id" : "IN", "totalpop" : 5544136
}
{
  "_id" : "AZ", "totalpop" : 3665228
}
{
  "_id" : "TN", "totalpop" : 4876457
}
type "it" for more
> db.zipcodes.aggregate([ { $group:{_id:"$state",totalpop:{$sum:"$pop"}},{$sort:{totalpop:-1}}}]
{
  "_id" : "CA", "totalpop" : 29754890
}
{
  "_id" : "NM", "totalpop" : 17990442
}
{
  "_id" : "TX", "totalpop" : 16984601
}
{
  "_id" : "FL", "totalpop" : 12686644
}
{
  "_id" : "PA", "totalpop" : 11881643
}
{
  "_id" : "IL", "totalpop" : 11427576
}
{
  "_id" : "OH", "totalpop" : 10846517
}
{
  "_id" : "MI", "totalpop" : 9295297
}
{
  "_id" : "ND", "totalpop" : 7730188
}
{
  "_id" : "NC", "totalpop" : 6628637
}
{
  "_id" : "GA", "totalpop" : 6478216
}
{
  "_id" : "VA", "totalpop" : 6181479
}
{
  "_id" : "MA", "totalpop" : 6016425
}
{
  "_id" : "IN", "totalpop" : 5544136
}
{
  "_id" : "MO", "totalpop" : 5110648
}
{
  "_id" : "WI", "totalpop" : 4891769
}
{
  "_id" : "TN", "totalpop" : 4876457
}
{
  "_id" : "WA", "totalpop" : 4866692
}
{
  "_id" : "MD", "totalpop" : 4781379
}
{
  "_id" : "MN", "totalpop" : 4372982
}
type "it" for more
>
```

7,8,9)

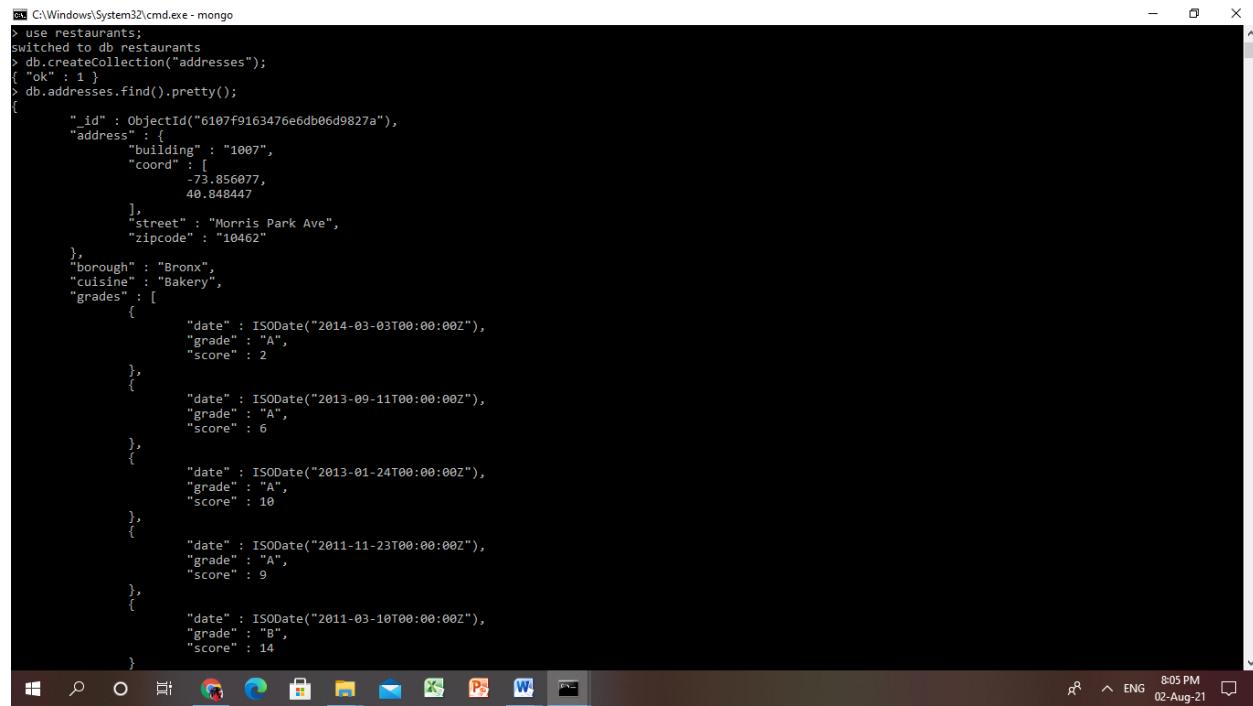
```
C:\Windows\System32\cmd.exe - mongo
> db.zipcodes.aggregate([ {$group:{ _id:"$state",totalpop:{$sum:"$pop"} }},{$sort:{totalpop:-1}},{$limit:3}])
[{"_id": "CA", "totalpop": 29754890}, {"_id": "NY", "totalpop": 17990402}, {"_id": "TX", "totalpop": 16984601}
> db.zipcodes.aggregate([ {$group:{ _id:(city:"$city",state:"$state"),totalpop:{$sum:"$pop"} }},{$sort:{totalpop:-1}}])
[{"_id": {"city": "NICHOLVILLE", "state": "NY"}, "totalpop": 1382}, {"_id": {"city": "COLBY", "state": "WI"}, "totalpop": 3621}, {"_id": {"city": "CASSVILLE", "state": "NY"}, "totalpop": 1566}, {"_id": {"city": "WILMETTE", "state": "IL"}, "totalpop": 26657}, {"_id": {"city": "KANKAKEE", "state": "IL"}, "totalpop": 35952}, {"_id": {"city": "VANDALIA", "state": "IL"}, "totalpop": 7894}, {"_id": {"city": "COAL HILL", "state": "AR"}, "totalpop": 1179}, {"_id": {"city": "HANKAMER", "state": "TX"}, "totalpop": 233}, {"_id": {"city": "MITCHELL", "state": "GA"}, "totalpop": 708}, {"_id": {"city": "MILTON", "state": "FL"}, "totalpop": 29495}, {"_id": {"city": "AGUILAR", "state": "CO"}, "totalpop": 928}, {"_id": {"city": "TAHOE CITY", "state": "CA"}, "totalpop": 4944}, {"_id": {"city": "BORING", "state": "OR"}, "totalpop": 11406}, {"_id": {"city": "ECHO", "state": "MN"}, "totalpop": 79}, {"_id": {"city": "WARREN", "state": "RI"}, "totalpop": 11385}, {"_id": {"city": "SCALY MOUNTAIN", "state": "NC"}, "totalpop": 405}, {"_id": {"city": "ALAMO", "state": "TX"}, "totalpop": 16555}, {"_id": {"city": "HARTFORD", "state": "WI"}, "totalpop": 15889}, {"_id": {"city": "CODY", "state": "WY"}, "totalpop": 11985}, {"_id": {"city": "MENDON", "state": "MI"}, "totalpop": 3598}
Type "it" for more
> db.zipcodes.aggregate([ {$group:{ _id:(city:"$city",state:"$state"),totalpop:{$sum:"$pop"} }},{$sort:{totalpop:-1}}])
uncaught exception: SyntaxError: missing : after property id :
@(shell):1:56
> db.zipcodes.aggregate([ {$group:{ _id:(city:"$city",state:"$state"),totalpop:{$sum:"$pop"} },{$sort:{totalpop:-1}}}]
[{"_id": {"city": "CHICAGO", "state": "IL"}, "totalpop": 2452177}, {"_id": {"city": "BROOKLYN", "state": "NY"}, "totalpop": 2300504}, {"_id": {"city": "LOS ANGELES", "state": "CA"}, "totalpop": 2102295}, {"_id": {"city": "HOUSTON", "state": "TX"}, "totalpop": 2095918}, {"_id": {"city": "PHILADELPHIA", "state": "PA"}, "totalpop": 1610956}, {"_id": {"city": "NEW YORK", "state": "NY"}, "totalpop": 1476790}, {"_id": {"city": "BROMIX", "state": "NY"}, "totalpop": 1209548}, {"_id": {"city": "SAN DIEGO", "state": "CA"}, "totalpop": 1049298}, {"_id": {"city": "DETROIT", "state": "MI"}, "totalpop": 9624243}, {"_id": {"city": "DALLAS", "state": "TX"}, "totalpop": 940191}, {"_id": {"city": "PHOENIX", "state": "AZ"}, "totalpop": 890855}, {"_id": {"city": "MIAMI", "state": "FL"}, "totalpop": 825232}, {"_id": {"city": "SAN JOSE", "state": "CA"}, "totalpop": 816653}, {"_id": {"city": "SAN ANTONIO", "state": "TX"}, "totalpop": 811792}, {"_id": {"city": "BALTIMORE", "state": "MD"}, "totalpop": 733081}, {"_id": {"city": "SAN FRANCISCO", "state": "CA"}, "totalpop": 723993}, {"_id": {"city": "MEMPHIS", "state": "TN"}, "totalpop": 632837}, {"_id": {"city": "SACRAMENTO", "state": "CA"}, "totalpop": 628279}, {"_id": {"city": "JACKSONVILLE", "state": "FL"}, "totalpop": 610160}, {"_id": {"city": "ATLANTA", "state": "GA"}, "totalpop": 609591}
Type "it" for more
A^R ^ ENG 6:41 PM 02-Aug-21
```

10&11)

```
C:\Windows\System32\cmd.exe - mongo
[{"_id": {"city": "DALLAS", "state": "TX"}, "totalpop": 940191}, {"_id": {"city": "PHOENIX", "state": "AZ"}, "totalpop": 800853}, {"_id": {"city": "MIAMI", "state": "FL"}, "totalpop": 825232}, {"_id": {"city": "SAN JOSE", "state": "CA"}, "totalpop": 816653}, {"_id": {"city": "SAN ANTONIO", "state": "TX"}, "totalpop": 811792}, {"_id": {"city": "BALTIMORE", "state": "MD"}, "totalpop": 733081}, {"_id": {"city": "SAN FRANCISCO", "state": "CA"}, "totalpop": 723993}, {"_id": {"city": "MEMPHIS", "state": "TN"}, "totalpop": 632837}, {"_id": {"city": "SACRAMENTO", "state": "CA"}, "totalpop": 628279}, {"_id": {"city": "JACKSONVILLE", "state": "FL"}, "totalpop": 610160}, {"_id": {"city": "ATLANTA", "state": "GA"}, "totalpop": 609591}
Type "it" for more
> db.zipcodes.aggregate([ {$group:{ _id:(city:"$city",state:"$state"),totalpop:{$sum:"$pop"} }},{$sort:{totalpop:-1}},{$limit:3}])
uncaught exception: ReferenceError: $limit3 is not defined :
@(shell):1:116
> db.zipcodes.aggregate([ {$group:{ _id:(city:"$city",state:"$state"),totalpop:{$sum:"$pop"} },{$sort:{totalpop:-1}},{$limit:3}}])
[{"_id": {"city": "CHICAGO", "state": "IL"}, "totalpop": 2452177}, {"_id": {"city": "BROOKLYN", "state": "NY"}, "totalpop": 2300504}, {"_id": {"city": "LOS ANGELES", "state": "CA"}, "totalpop": 2102295}
> db.zipcodes.aggregate([ {$match:{state:"TX"}},{$group:{_id:"$city",totalpop:{$sum:"$pop"} }},{$sort:{totalpop:1}},{$limit:3}])
uncaught exception: SyntaxError: missing ] after element list :
@(shell):1:104
> db.zipcodes.aggregate([ {$match:{state:"TX"}},{$group:{_id:"$city",totalpop:{$sum:"$pop"} }},{$sort:{totalpop:1}},{$limit:3}])
[{"_id": "ECLETO", "totalpop": 0}, {"_id": "FULTON", "totalpop": 0}, {"_id": "BEND", "totalpop": 1}
A^R ^ ENG 6:47 PM 02-Aug-21
```

Assignment 3

1)



```
C:\Windows\System32\cmd.exe - mongo
> use restaurants;
switched to db restaurants
> db.createCollection("addresses");
{
  "ok" : 1
}
> db.addresses.find().pretty();
{
  "_id" : ObjectId("6107f9163476e6db06d9827a"),
  "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
    }
  ]
}
```

2&3)

```

C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({}, { _id:1, name:1, cuisine:1, borough:1, restaurant_id:1 })
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827a"),
  "borough": "Bronx",
  "cuisine": "Bakery",
  "name": "Morris Park Bake Shop"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827b"),
  "borough": "Brooklyn",
  "cuisine": "Hamburgers",
  "name": "Wendy'S"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827c"),
  "borough": "Queens",
  "cuisine": "American",
  "name": "Brunos On The Boulevard"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827d"),
  "borough": "Queens",
  "cuisine": "Jewish/Kosher",
  "name": "Tov Kosher Kitchen"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827e"),
  "borough": "Staten Island",
  "cuisine": "Jewish/Kosher",
  "name": "Kosher Island"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9827f"),
  "borough": "Brooklyn",
  "cuisine": "Delicatessen",
  "name": "Wilken's Fine Food"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98281"),
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "Riviera Caterer"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98282"),
  "borough": "Bronx",
  "cuisine": "American",
  "name": "Wild Asia"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98283"),
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "C & C Catering Service"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98284"),
  "borough": "Brooklyn",
  "cuisine": "Chinese",
  "name": "May May Kitchen"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98285"),
  "borough": "Brooklyn",
  "cuisine": "Jewish/Kosher",
  "name": "Seuda Foods"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98286"),
  "borough": "Manhattan",
  "cuisine": "American",
  "name": "i East 66th Street Kitchen"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98287"),
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "Regina Caterers"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98288"),
  "borough": "Manhattan",
  "cuisine": "Irish",
  "name": "Dj Reynolds Pub And Restaurant"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d98289"),
  "borough": "Brooklyn",
  "cuisine": "Ice Cream, Gelato, Yogurt, Ices",
  "name": "Carvel Ice Cream"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9828a"),
  "borough": "Brooklyn",
  "cuisine": "Delicatessen",
  "name": "Nordic Delicacies"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9828b"),
  "borough": "Queens",
  "cuisine": "Ice Cream, Gelato, Yogurt, Ices",
  "name": "Carvel Ice Cream"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9828c"),
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "The Movable Feast"
},
{
  "_id": ObjectId("6107f9163475e6dd0e6d9828d"),
  "borough": "Queens",
  "cuisine": "Delicatessen",
  "name": "Sal'S Deli"
}
Type "it" for more
> db.addresses.find({ _id:0, name:1, cuisine:1, borough:1, restaurant_id:1 })
uncaught exception: SyntaxError: unexpected token: '{'
@shell:1:17
> db.addresses.find({ _id:0, name:1, cuisine:1, borough:1, restaurant_id:1 })
{
  "borough": "Bronx",
  "cuisine": "Bakery",
  "name": "Morris Park Bake Shop",
  "restaurant_id": "30075445"
},
{
  "borough": "Brooklyn",
  "cuisine": "Hamburgers",
  "name": "Wendy'S",
  "restaurant_id": "30112340"
},
{
  "borough": "Queens",
  "cuisine": "American",
  "name": "Brunos On The Boulevard",
  "restaurant_id": "40356151"
},
{
  "borough": "Queens",
  "cuisine": "Jewish/Kosher",
  "name": "Tov Kosher Kitchen",
  "restaurant_id": "40356668"
},
{
  "borough": "Staten Island",
  "cuisine": "Jewish/Kosher",
  "name": "Kosher Island",
  "restaurant_id": "40356442"
},
{
  "borough": "Brooklyn",
  "cuisine": "Delicatessen",
  "name": "Wilken's Fine Food",
  "restaurant_id": "40356483"
},
{
  "borough": "Brooklyn",
  "cuisine": "Ice Cream, Gelato, Yogurt, Ices",
  "name": "Taste The Tropics Ice Cream",
  "restaurant_id": "40356731"
},
{
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "Riviera Caterer",
  "restaurant_id": "40356018"
},
{
  "borough": "Bronx",
  "cuisine": "American",
  "name": "Wild Asia",
  "restaurant_id": "40357217"
},
{
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "C & C Catering Service",
  "restaurant_id": "40357437"
},
{
  "borough": "Brooklyn",
  "cuisine": "Chinese",
  "name": "May May Kitchen",
  "restaurant_id": "40358429"
},
{
  "borough": "Brooklyn",
  "cuisine": "Jewish/Kosher",
  "name": "Seuda Foods",
  "restaurant_id": "40360045"
},
{
  "borough": "Manhattan",
  "cuisine": "American",
  "name": "i East 66th Street Kitchen",
  "restaurant_id": "40359480"
},
{
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "Regina Caterers",
  "restaurant_id": "40356649"
},
{
  "borough": "Manhattan",
  "cuisine": "Irish",
  "name": "Dj Reynolds Pub And Restaurant",
  "restaurant_id": "30191841"
},
{
  "borough": "Brooklyn",
  "cuisine": "Ice Cream, Gelato, Yogurt, Ices",
  "name": "Carvel Ice Cream",
  "restaurant_id": "40360076"
},
{
  "borough": "Brooklyn",
  "cuisine": "Delicatessen",
  "name": "Nordic Delicacies",
  "restaurant_id": "40361396"
},
{
  "borough": "Queens",
  "cuisine": "Ice Cream, Gelato, Yogurt, Ices",
  "name": "Carvel Ice Cream",
  "restaurant_id": "40361322"
}

```

4)

```

C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({ _id:0, name:1, cuisine:1, borough:1, restaurant_id:1, "address.zipcode":1 }).pretty()
{
  "address": {
    "zipcode": "10462"
  },
  "borough": "Bronx",
  "cuisine": "Bakery",
  "name": "Morris Park Bake Shop",
  "restaurant_id": "30075445"
},
{
  "address": {
    "zipcode": "11225"
  },
  "borough": "Brooklyn",
  "cuisine": "Hamburgers",
  "name": "Wendy'S",
  "restaurant_id": "30112340"
},
{
  "address": {
    "zipcode": "11369"
  },
  "borough": "Queens",
  "cuisine": "American",
  "name": "Brunos On The Boulevard",
  "restaurant_id": "40356151"
},
{
  "address": {
    "zipcode": "11374"
  },
  "borough": "Queens",
  "cuisine": "Jewish/Kosher",
  "name": "Tov Kosher Kitchen",
  "restaurant_id": "40356668"
},
{
  "address": {
    "zipcode": "10314"
  },
  "borough": "Staten Island",
  "cuisine": "Jewish/Kosher",
  "name": "Kosher Island",
  "restaurant_id": "40356442"
}

```

5)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"borough": "Bronx"}).pretty()
{
    "_id" : ObjectId("6107f9163476e6db06d9827a"),
    "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
        }
    ],
    "name" : "Morris Park Bake Shop",
    "restaurant_id" : "30075445"
}

```

6)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"borough": "Bronx"}).limit(5)
{
    "_id" : ObjectId("6107f9163476e6db06d9827a"),
    "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("2013-01-24T00:00:00Z"),
            "grade" : "A",
            "score" : 6
        },
        {
            "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("6107f9163476e6db06d98282"),
    "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" : 3
        }
    ],
    "name" : "Wild Asia",
    "restaurant_id" : "40367217"
},
{
    "_id" : ObjectId("6107f9163476e6db06d98297"),
    "address" : {
        "building" : "1006",
        "coord" : [
            -73.84856970000002,
            40.8903781
        ],
        "street" : "East 233 Street",
        "zipcode" : "10466"
    },
    "borough" : "Bronx",
    "cuisine" : "Ice Cream, Gelato, Yogurt, Ices",
    "grades" : [
        {
            "date" : ISODate("2014-04-24T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2013-09-05T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2013-02-21T00:00:00Z"),
            "grade" : "A",
            "score" : 9
        },
        {
            "date" : ISODate("2012-07-03T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2011-07-11T00:00:00Z"),
            "grade" : "A",
            "score" : 5
        }
    ],
    "name" : "Carvel Ice Cream",
    "restaurant_id" : "40363093"
},
{
    "_id" : ObjectId("6107f9163476e6db06d982a1"),
    "address" : {
        "building" : "1236",
        "coord" : [
            -73.8893654,
            40.81376179999999
        ],
        "street" : "238 Spofford Ave",
        "zipcode" : "10474"
    },
    "borough" : "Bronx",
    "cuisine" : "Chinese",
    "grades" : [
        {
            "date" : ISODate("2013-12-30T00:00:00Z"),
            "grade" : "A",
            "score" : 8
        },
        {
            "date" : ISODate("2013-02-21T00:00:00Z"),
            "grade" : "A",
            "score" : 9
        },
        {
            "date" : ISODate("2012-07-11T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2012-06-12T00:00:00Z"),
            "grade" : "B",
            "score" : 15
        }
    ],
    "name" : "Happy Garden",
    "restaurant_id" : "40363289"
},
{
    "_id" : ObjectId("6107f9163476e6db06d982b0"),
    "address" : {
        "building" : "277",
        "coord" : [
            -73.8941893,
            40.8634684
        ],
        "street" : "East Kingsbridge Road",
        "zipcode" : "10468"
    },
    "borough" : "Bronx",
    "cuisine" : "Chinese",
    "grades" : [
        {
            "date" : ISODate("2014-03-03T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2013-12-30T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2013-03-19T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2012-08-29T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2011-08-17T00:00:00Z"),
            "grade" : "A",
            "score" : 13
        }
    ],
    "name" : "Happy Garden",
    "restaurant_id" : "40364296"
}
> db.addresses.find({"borough": "Bronx"}).pretty()

```

7)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"borough": "Bronx"}).pretty()
{
    "_id" : ObjectId("6107f9163476e6db06d9827a"),
    "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
        }
    ],
    "name" : "Morris Park Bake Shop",
    "restaurant_id" : "30075445"
}

```

8)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"grades.score": {"$gt": 90}})
{
    "_id" : ObjectId("6107f9163476e6db06d983d7"),
    "address" : {
        "building" : "65",
        "coord" : [
            -73.9782725,
            40.7624022
        ],
        "street" : "West 54 Street",
        "zipcode" : "10019"
    },
    "borough" : "Manhattan",
    "cuisine" : "American",
    "grades" : [
        {
            "date" : ISODate("2014-08-22T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2014-03-28T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2013-09-25T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2013-04-08T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2013-10-19T00:00:00Z"),
            "grade" : "A",
            "score" : 13
        }
    ],
    "name" : "Murals On 54/Randolph's S",
    "restaurant_id" : "40372466"
},
{
    "_id" : ObjectId("6107f9163476e6db06d98477"),
    "address" : {
        "building" : "345",
        "coord" : [
            -73.98464626,
            40.72566739
        ],
        "street" : "East 6 Street",
        "zipcode" : "10003"
    },
    "borough" : "Manhattan",
    "cuisine" : "Indian",
    "grades" : [
        {
            "date" : ISODate("2014-09-15T00:00:00Z"),
            "grade" : "A",
            "score" : 5
        },
        {
            "date" : ISODate("2014-01-14T00:00:00Z"),
            "grade" : "A",
            "score" : 8
        },
        {
            "date" : ISODate("2013-05-30T00:00:00Z"),
            "grade" : "A",
            "score" : 12
        },
        {
            "date" : ISODate("2013-04-24T00:00:00Z"),
            "grade" : "A",
            "score" : 2
        },
        {
            "date" : ISODate("2012-10-01T00:00:00Z"),
            "grade" : "A",
            "score" : 9
        },
        {
            "date" : ISODate("2012-04-06T00:00:00Z"),
            "grade" : "C",
            "score" : 92
        },
        {
            "date" : ISODate("2011-11-03T00:00:00Z"),
            "grade" : "C",
            "score" : 41
        }
    ],
    "name" : "Gandhi",
    "restaurant_id" : "40381295"
},
{
    "_id" : ObjectId("6107f9163476e6db06d985d"),
    "address" : {
        "building" : "130",
        "coord" : [
            -73.984758,
            40.745793
        ],
        "street" : "Madison Avenue",
        "zipcode" : "10016"
    },
    "borough" : "Manhattan",
    "cuisine" : "Pizza/Italian",
    "grades" : [
        {
            "date" : ISODate("2014-12-24T00:00:00Z"),
            "grade" : "Z",
            "score" : 31
        },
        {
            "date" : ISODate("2014-06-17T00:00:00Z"),
            "grade" : "C",
            "score" : 98
        },
        {
            "date" : ISODate("2013-12-31T00:00:00Z"),
            "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"
}

```

9)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$and:[{"grades.score": {"$gt":90}}, {"grades.score": {"$lt":100}}]})
```

... (Output truncated)

10)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$and:[{"grades.score": {"$gt":90}}, {"grades.score": {"$lt":100}}]})
```

... (Output truncated)

11)

```

C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$and:[{"cuisine":{$ne:"American"}}, {"address.coord.0":{$lt:-65.754168}}, {"grades.score":{$gt:70}}]})

{
  "_id": ObjectId("6107f9163476ed0b6d983d7"),
  "address": {
    "building": "65",
    "coord": [-73.9782725, 40.7624022],
    "street": "West 54 Street",
    "zipcode": "10019"
  },
  "borough": "Manhattan",
  "cuisine": "American",
  "grades": [
    {
      "date": ISODate("2014-08-22T00:00:00Z"),
      "grade": "A",
      "score": 11
    },
    {
      "date": ISODate("2014-01-14T00:00:00Z"),
      "grade": "B",
      "score": 25
    }
  ],
  "name": "Murals On 54/Randolph's S",
  "restaurant_id": "40372466"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98477"),
  "address": {
    "building": "345",
    "coord": [-73.9864626, 40.7256739],
    "street": "East 6 Street",
    "zipcode": "10003"
  },
  "borough": "Manhattan",
  "cuisine": "Indian",
  "grades": [
    {
      "date": ISODate("2014-09-15T00:00:00Z"),
      "grade": "A",
      "score": 8
    },
    {
      "date": ISODate("2012-10-01T00:00:00Z"),
      "grade": "A",
      "score": 131
    }
  ],
  "name": "Murals On 54/Randolph's S",
  "restaurant_id": "40372466"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98507"),
  "address": {
    "building": "14",
    "coord": [-73.9883998, 40.740735],
    "street": "East 23 Street",
    "zipcode": "10010"
  },
  "borough": "Manhattan",
  "cuisine": "American",
  "grades": [
    {
      "date": ISODate("2014-10-28T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-08-08T00:00:00Z"),
      "grade": "C",
      "score": 58
    }
  ],
  "name": "Gandhi",
  "restaurant_id": "40381295"
},
{
  "_id": ObjectId("6107f9163476ed0b6d9857"),
  "address": {
    "building": "101",
    "coord": [-73.9243061, 40.827629],
    "street": "East 161 Street",
    "zipcode": "10451"
  },
  "borough": "Bronx",
  "cuisine": "Latin (Cuban, Dominican, Puerto Rican, South & Central American)",
  "grades": [
    {
      "date": ISODate("2014-04-10T00:00:00Z"),
      "grade": "A",
      "score": 13
    },
    {
      "date": ISODate("2012-06-15T00:00:00Z"),
      "grade": "C",
      "score": 71
    }
  ],
  "name": "Live Bait Bar & Restaurant",
  "restaurant_id": "40372337"
},
{
  "_id": ObjectId("6107f9163476ed0b6d985d"),
  "address": {
    "building": "130",
    "coord": [-73.984758, 40.7457939],
    "street": "Madison Avenue",
    "zipcode": "10016"
  },
  "borough": "Manhattan",
  "cuisine": "Pizza/Italian",
  "grades": [
    {
      "date": ISODate("2014-12-24T00:00:00Z"),
      "grade": "Z",
      "score": 31
    },
    {
      "date": ISODate("2014-11-17T00:00:00Z"),
      "grade": "C",
      "score": 98
    }
  ],
  "name": "El Molino Rojo Restaurant",
  "restaurant_id": "40393688"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98742"),
  "address": {
    "building": "289",
    "coord": [-73.9461729999999, 40.7137587],
    "street": "Manhattan Avenue",
    "zipcode": "10021"
  },
  "borough": "Brooklyn",
  "cuisine": "Bakery",
  "grades": [
    {
      "date": ISODate("2014-03-19T00:00:00Z"),
      "grade": "A",
      "score": 11
    },
    {
      "date": ISODate("2012-05-02T00:00:00Z"),
      "grade": "A",
      "score": 11
    }
  ],
  "name": "Fortunato Bros Cafe & Bakery",
  "restaurant_id": "40400561"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98cd3"),
  "address": {
    "building": "243",
    "coord": [-73.9889479, 40.7568894],
    "street": "West 42 Street",
    "zipcode": "10036"
  },
  "borough": "Manhattan",
  "cuisine": "American",
  "grades": [
    {
      "date": ISODate("2014-11-19T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-05-16T00:00:00Z"),
      "grade": "A",
      "score": 18
    }
  ],
  "name": "B.B. Kings",
  "restaurant_id": "40704853"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98d67"),
  "address": {
    "building": "231",
    "coord": [-73.9772294, 40.7527262],
    "street": "Grand Central Station",
    "zipcode": "10017"
  },
  "borough": "Manhattan",
  "cuisine": "Italian",
  "grades": [
    {
      "date": ISODate("2015-01-01T00:00:00Z"),
      "grade": "Z",
      "score": 28
    },
    {
      "date": ISODate("2013-05-17T00:00:00Z"),
      "grade": "B",
      "score": 14
    }
  ],
  "name": "Two Boots Grand Central",
  "restaurant_id": "40725591"
},
{
  "_id": ObjectId("6107f9173476ed0b6d98e47"),
  "address": {
    "building": "77",
    "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
    }
  ],
  "name": "West 79th Street Boat Basin Cafe",
  "restaurant_id": "40725591"
}

```

13)

```

C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$and:[{"cuisine":{$ne:"American"}}, {"address.coord.1":{$lt:-65.754168}}, {"grades.score":{$gt:70}}]})

{
  "_id": ObjectId("6107f9163476ed0b6d98986"),
  "address": {
    "building": "89",
    "coord": [-73.995899, 40.7168015],
    "street": "Baxter Street",
    "zipcode": "10013"
  },
  "borough": "Manhattan",
  "cuisine": "Vietnamese/Cambodian/Malaysia",
  "grades": [
    {
      "date": ISODate("2014-08-21T00:00:00Z"),
      "grade": "A",
      "score": 13
    },
    {
      "date": ISODate("2013-08-31T00:00:00Z"),
      "grade": "A",
      "score": 13
    }
  ],
  "name": "Thai Son",
  "restaurant_id": "40559606"
},
{
  "_id": ObjectId("6107f9163476ed0b6d989af"),
  "address": {
    "building": "8278",
    "coord": [-73.8814350999999, 40.7412552],
    "street": "Broadway",
    "zipcode": "11373"
  },
  "borough": "Queens",
  "cuisine": "Vietnamese/Cambodian/Malaysia",
  "grades": [
    {
      "date": ISODate("2013-05-20T00:00:00Z"),
      "grade": "A",
      "score": 13
    },
    {
      "date": ISODate("2012-12-26T00:00:00Z"),
      "grade": "A",
      "score": 10
    }
  ],
  "name": "Pho Bac Vietnamese Seafood Cuisine",
  "restaurant_id": "40578058"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98a26"),
  "address": {
    "building": "148",
    "coord": [-74.000254, 40.7172727],
    "street": "Centre Street",
    "zipcode": "10013"
  },
  "borough": "Manhattan",
  "cuisine": "Vietnamese/Cambodian/Malaysia",
  "grades": [
    {
      "date": ISODate("2014-10-01T00:00:00Z"),
      "grade": "A",
      "score": 7
    },
    {
      "date": ISODate("2014-05-19T00:00:00Z"),
      "grade": "C",
      "score": 5
    }
  ],
  "name": "Nha-Trang Centre Vietnamese Restaurant",
  "restaurant_id": "40571226"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98527"),
  "address": {
    "building": "300",
    "coord": [-73.985568, 40.7307496],
    "street": "East 12 Street",
    "zipcode": "10003"
  },
  "borough": "Manhattan",
  "cuisine": "Vegetarian",
  "grades": [
    {
      "date": ISODate("2014-02-05T00:00:00Z"),
      "grade": "A",
      "score": 13
    },
    {
      "date": ISODate("2013-04-24T00:00:00Z"),
      "grade": "A",
      "score": 19
    }
  ],
  "name": "Angelica Kitchen",
  "restaurant_id": "40388281"
},
{
  "_id": ObjectId("6107f9163476ed0b6d986df"),
  "address": {
    "building": "1307",
    "coord": [-73.9589834, 40.7714183999999],
    "street": "3 Avenue",
    "zipcode": "10021"
  },
  "borough": "Manhattan",
  "cuisine": "Vegetarian",
  "grades": [
    {
      "date": ISODate("2014-12-03T00:00:00Z"),
      "grade": "B",
      "score": 22
    },
    {
      "date": ISODate("2013-06-25T00:00:00Z"),
      "grade": "A",
      "score": 12
    }
  ],
  "name": "Village Yogurt",
  "restaurant_id": "40512123"
},
{
  "_id": ObjectId("6107f9163476ed0b6d988e5"),
  "address": {
    "building": "46",
    "coord": [-74.000252, 40.7356228],
    "street": "Greenwich Avenue",
    "zipcode": "10011"
  },
  "borough": "Manhattan",
  "cuisine": "Vegetarian",
  "grades": [
    {
      "date": ISODate("2014-07-01T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-12-31T00:00:00Z"),
      "grade": "A",
      "score": 11
    }
  ],
  "name": "Village Natural",
  "restaurant_id": "40536786"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98b88"),
  "address": {
    "building": "405",
    "coord": [-73.9856523999999, 40.7263767],
    "street": "East 6 Street",
    "zipcode": "10011"
  },
  "borough": "Manhattan",
  "cuisine": "Vegetarian",
  "grades": [
    {
      "date": ISODate("2013-05-24T00:00:00Z"),
      "grade": "A",
      "score": 9
    },
    {
      "date": ISODate("2013-07-31T00:00:00Z"),
      "grade": "A",
      "score": 11
    }
  ],
  "name": "Caravan Of Dreams",
  "restaurant_id": "40635781"
},
{
  "_id": ObjectId("6107f9163476ed0b6d98bab"),
  "address": {
    "building": "646",
    "coord": [-73.97279, 40.791289],
    "street": "Amsterdam Avenue",
    "zipcode": "10025"
  },
  "borough": "Manhattan",
  "cuisine": "Vegetarian",
  "grades": [
    {
      "date": ISODate("2014-02-19T00:00:00Z"),
      "grade": "A",
      "score": 13
    },
    {
      "date": ISODate("2012-11-29T00:00:00Z"),
      "grade": "A",
      "score": 12
    }
  ],
  "name": "Mama",
  "restaurant_id": "40644922"
}

```

14)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"name":{$regex:/"Wil.*"/}}, { id:0,restaurant_id:1,name:1,borough:1,cuisine:1})
{
  "borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Wilken'S Fine Food", "restaurant_id" : "40356483" }
{
  "borough" : "Bronx", "cuisine" : "American ", "name" : "Wild Asia", "restaurant_id" : "40357217" }
{
  "borough" : "Bronx", "cuisine" : "Pizza", "name" : "Wilbel Pizza", "restaurant_id" : "40871979" }
```

15)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"name":{$regex:/*ces$/}}, { id:0,restaurant_id:1,name:1,borough:1,cuisine:1})
{
  "borough" : "Manhattan", "cuisine" : "American ", "name" : "Pieces", "restaurant_id" : "40399910" }
{
  "borough" : "Queens", "cuisine" : "American ", "name" : "S.M.R Restaurant Services", "restaurant_id" : "40403857" }
{
  "borough" : "Manhattan", "cuisine" : "American ", "name" : "Good Shepherd Services", "restaurant_id" : "40403989" }
{
  "borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "The Ice Box-Ralph'S Famous Italian Ices", "restaurant_id" : "40690899" }
{
  "borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Alices", "restaurant_id" : "40782042" }
{
  "borough" : "Manhattan", "cuisine" : "American ", "name" : "Re: Sources", "restaurant_id" : "40876068" }
```

16)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"name":{$regex:/Reg/}}, {_id:0,restaurant_id:1, name:1, borough:1,cuisine:1})
[{"borough": "Brooklyn", "cuisine" : "American ", "name" : "Regina Caterers", "restaurant_id" : "40356649" },
 {"borough": "Manhattan", "cuisine" : "Café/Coffee/Tea", "name" : "Caffe Reggio", "restaurant_id" : "40369418" },
 {"borough": "Manhattan", "cuisine" : "American ", "name" : "Regency Hotel", "restaurant_id" : "40382679" },
 {"borough": "Manhattan", "cuisine" : "American ", "name" : "Regency Whist Club", "restaurant_id" : "40402377" },
 {"borough": "Queens", "cuisine" : "American ", "name" : "Rego Park Cafe", "restaurant_id" : "40523342" },
 {"borough": "Queens", "cuisine" : "Pizza", "name" : "Regina Pizza", "restaurant_id" : "40801325" },
 {"borough": "Manhattan", "cuisine" : "American ", "name" : "Regal Entertainment Group", "restaurant_id" : "40891782" }]
```

17)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({borough:"Bronx",cuisine:{$in:["American","Chinese"]}}, {_id:0,restaurant_id:1, name:1,borough:1,cuisine:1})
[{"borough": "Bronx", "cuisine" : "Chinese", "name" : "Happy Garden", "restaurant_id" : "40363289" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Happy Garden", "restaurant_id" : "40364296" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "China Wok II", "restaurant_id" : "40510328" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Dragon City", "restaurant_id" : "40529203" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Human Balcony", "restaurant_id" : "40551996" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Great Wall Restaurant", "restaurant_id" : "40552226" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Lucky House Restaurant", "restaurant_id" : "40571587" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "New Wah Kitchen", "restaurant_id" : "40573101" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "New Hing Restaurant", "restaurant_id" : "40701165" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Hong Kong Restaurant", "restaurant_id" : "40765358" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Kristy's Restaurant", "restaurant_id" : "40884049" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "East Dynasty", "restaurant_id" : "40827529" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Lin Home Chinese Restaura", "restaurant_id" : "40842437" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Peacock Restaurant", "restaurant_id" : "408849313" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "Lin S Garden", "restaurant_id" : "40857446" },
 {"borough": "Bronx", "cuisine" : "Chinese", "name" : "New Rainbow Restaurant", "restaurant_id" : "40899178" }]
```

18)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$or:[{"borough": "Staten Island"}, {"borough": "Bronx Brooklyn"}, {"borough": "Queens"}]}, { _id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
{
  "borough": "Queens", "cuisine": "American ", "name": "Brunos On The Boulevard", "restaurant_id": "40356151" }
  "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": "Queens", "cuisine": "Ice Cream, Gelato, Yogurt, Ices", "name": "Carvel Ice Cream", "restaurant_id": "40361322" }
  "borough": "Queens", "cuisine": "Delicatessen", "name": "Sal's Deli", "restaurant_id": "40361618" }
  "borough": "Queens", "cuisine": "Delicatessen", "name": "Steve Chu'S Deli & Grocery", "restaurant_id": "40361998" }
  "borough": "Queens", "cuisine": "Chinese", "name": "Ho Mei Restaurant", "restaurant_id": "40362432" }
  "borough": "Queens", "cuisine": "Delicatessen", "name": "Tony'S Deli", "restaurant_id": "40363333" }
  "borough": "Staten Island", "cuisine": "Delicatessen", "name": "Bagels N Buns", "restaurant_id": "40363427" }
  "borough": "Queens", "cuisine": "Bagels/Pretzels", "name": "Hot Bagels", "restaurant_id": "40363565" }
  "borough": "Queens", "cuisine": "American ", "name": "Snack Time Grill", "restaurant_id": "40363590" }
  "borough": "Staten Island", "cuisine": "Ice Cream, Gelato, Yogurt, Ices", "name": "Carvel Ice Cream", "restaurant_id": "40363834" }
  "borough": "Queens", "cuisine": "American ", "name": "Terminal Cafe/Yankee Clipper", "restaurant_id": "40364262" }
  "borough": "Staten Island", "cuisine": "Delicatessen", "name": "Plaza Bagels & Deli", "restaurant_id": "40364286" }
  "borough": "Staten Island", "cuisine": "Delicatessen", "name": "B & M Hot Bagel & Grocery", "restaurant_id": "40364299" }
  "borough": "Queens", "cuisine": "German ", "name": "Gottsheer Hall", "restaurant_id": "40364449" }
  "borough": "Queens", "cuisine": "Jewish/Kosher", "name": "Ben-Best Deli & Restaurant", "restaurant_id": "40364529" }
  "borough": "Staten Island", "cuisine": "American ", "name": "Great Kills Yacht Club", "restaurant_id": "40364610" }
  "borough": "Queens", "cuisine": "Pizza/Italian", "name": "New Park Pizzeria & Restaurant", "restaurant_id": "40364744" }
  "borough": "Queens", "cuisine": "American ", "name": "Douglaston Club", "restaurant_id": "40364858" }
Type "it" for more
>
```

19)

```
C:\Windows\System32\cmd.exe - mongo
Type "it" for more
> db.addresses.find({borough:{$nin:["Staten Island", "Queens", "Bronx", "Brooklyn"]}}, { _id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
{
  "borough": "Manhattan", "cuisine": "American ", "name": "1 East 66th Street Kitchen", "restaurant_id": "40359480" }
  "borough": "Manhattan", "cuisine": "Irish", "name": "Dj Reynolds Pub And Restaurant", "restaurant_id": "30191841" }
  "borough": "Manhattan", "cuisine": "Delicatessen", "name": "Bully'S Deli", "restaurant_id": "40361708" }
  "borough": "Manhattan", "cuisine": "Chicken", "name": "Harriet'S Kitchen", "restaurant_id": "40362099" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Glorious Food", "restaurant_id": "40361521" }
  "borough": "Manhattan", "cuisine": "American ", "name": "P & S Deli Grocery", "restaurant_id": "40362264" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Angelika Film Center", "restaurant_id": "40362274" }
  "borough": "Manhattan", "cuisine": "Turkish", "name": "The Country Cafe", "restaurant_id": "40362715" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Downtown Deli", "restaurant_id": "40363021" }
  "borough": "Manhattan", "cuisine": "Bakery", "name": "Olive'S", "restaurant_id": "40363151" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Cafe Metro", "restaurant_id": "40363298" }
  "borough": "Manhattan", "cuisine": "Sandwiches/Salads/Mixed Buffet", "name": "Lexler Deli", "restaurant_id": "40363426" }
  "borough": "Manhattan", "cuisine": "Continental", "name": "Lorenzo & Maria'S", "restaurant_id": "40363630" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Berkely ", "restaurant_id": "40363685" }
  "borough": "Manhattan", "cuisine": "Pizza", "name": "Domino'S Pizza", "restaurant_id": "40363644" }
  "borough": "Manhattan", "cuisine": "Pizza", "name": "Domino'S Pizza", "restaurant_id": "40363945" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Spoon Bread Catering", "restaurant_id": "40364179" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Metropolitan Club", "restaurant_id": "40364347" }
  "borough": "Manhattan", "cuisine": "American ", "name": "21 Club", "restaurant_id": "40364362" }
  "borough": "Manhattan", "cuisine": "American ", "name": "Palm Restaurant", "restaurant_id": "40364355" }
Type "it" for more
>
```

20)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"grades.score":{$lte:10}}, { _id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
"borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
"borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
"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" }
"borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "Riviera Caterers", "restaurant_id" : "40356018" }
"borough" : "Bronx", "cuisine" : "American", "name" : "Wild Asia", "restaurant_id" : "40357217" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "C & C Catering Service", "restaurant_id" : "40357437" }
"borough" : "Brooklyn", "cuisine" : "Chinese", "name" : "May May Kitchen", "restaurant_id" : "40358429" }
"borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40360045" }
"borough" : "Manhattan", "cuisine" : "American", "name" : "1 East 66th Street Kitchen", "restaurant_id" : "40359480" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
"borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
"borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360076" }
"borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Nordic Delicacies", "restaurant_id" : "40361390" }
"borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "The Movable Feast", "restaurant_id" : "40361666" }
"borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Sal'S Deli", "restaurant_id" : "40361618" }
"borough" : "Manhattan", "cuisine" : "Delicatessen", "name" : "Bully'S Deli", "restaurant_id" : "40361708" }
Type "it" for more
>
```

21)

```
C:\Windows\System32\cmd.exe - mongo
Type "it" for more
> db.addresses.find({$nor:[{cuisine:{$in:["American","Chinese"]}}, {name:/Wil.*/}]}, { _id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
"borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
"borough" : "Brooklyn", "cuisine" : "Hamburgers", "name" : "Wendy'S", "restaurant_id" : "30112340" }
"borough" : "Queens", "cuisine" : "American", "name" : "Brunos On The Boulevard", "restaurant_id" : "40356151" }
"borough" : "Staten Island", "cuisine" : "Jewish/Kosher", "name" : "Tov Kosher Kitchen", "restaurant_id" : "40356668" }
"borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Kosher Island", "restaurant_id" : "40356442" }
"borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Taste The Tropics Ice Cream", "restaurant_id" : "40356731" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "Riviera Caterers", "restaurant_id" : "40356018" }
"borough" : "Bronx", "cuisine" : "American", "name" : "C & C Catering Service", "restaurant_id" : "40357437" }
"borough" : "Brooklyn", "cuisine" : "Jewish/Kosher", "name" : "Seuda Foods", "restaurant_id" : "40360045" }
"borough" : "Manhattan", "cuisine" : "American", "name" : "1 East 66th Street Kitchen", "restaurant_id" : "40359480" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "Regina Caterers", "restaurant_id" : "40356649" }
"borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "30191841" }
"borough" : "Brooklyn", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40360076" }
"borough" : "Brooklyn", "cuisine" : "Delicatessen", "name" : "Nordic Delicacies", "restaurant_id" : "40361390" }
"borough" : "Queens", "cuisine" : "Ice Cream, Gelato, Yogurt, Ices", "name" : "Carvel Ice Cream", "restaurant_id" : "40361322" }
"borough" : "Brooklyn", "cuisine" : "American", "name" : "The Movable Feast", "restaurant_id" : "40361666" }
"borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Sal'S Deli", "restaurant_id" : "40361618" }
"borough" : "Manhattan", "cuisine" : "Delicatessen", "name" : "Bully'S Deli", "restaurant_id" : "40361708" }
"borough" : "Queens", "cuisine" : "Delicatessen", "name" : "Steve Chu'S Deli & Grocery", "restaurant_id" : "40361998" }
"borough" : "Manhattan", "cuisine" : "Chicken", "name" : "Harriet'S Kitchen", "restaurant_id" : "40362098" }
Type "it" for more
>
```

22)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"grades":{$elemMatch:{"date":ISODate("2014-08-11T00:00:00Z"),"grade":"A","score":11}}},{_id:0,restaurant_id:1,name:1,grades:1}).pretty()
{
    "grades" : [
        {
            "date" : ISODate("2014-08-11T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        },
        {
            "date" : ISODate("2013-12-10T00:00:00Z"),
            "grade" : "A",
            "score" : 9
        },
        {
            "date" : ISODate("2013-06-10T00:00:00Z"),
            "grade" : "A",
            "score" : 12
        },
        {
            "date" : ISODate("2012-06-08T00:00:00Z"),
            "grade" : "A",
            "score" : 13
        },
        {
            "date" : ISODate("2012-01-25T00:00:00Z"),
            "grade" : "A",
            "score" : 8
        },
        {
            "date" : ISODate("2011-09-13T00:00:00Z"),
            "grade" : "A",
            "score" : 12
        }
    ],
    "name" : "Don Filippo Restaurant",
    "restaurant_id" : "40372417"
}
>
```

23)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({$and:[{"grades.1.grade":"A"}, {"grades.1.score":9}, {"grades.1.date":ISODate("2014-08-11T00:00:00Z")}]},{_id:0,restaurant_id:1,name:1,grades:1}).pretty()
{
    "grades" : [
        {
            "date" : ISODate("2015-01-12T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2014-08-11T00:00:00Z"),
            "grade" : "A",
            "score" : 9
        },
        {
            "date" : ISODate("2014-01-14T00:00:00Z"),
            "grade" : "A",
            "score" : 13
        },
        {
            "date" : ISODate("2013-02-07T00:00:00Z"),
            "grade" : "A",
            "score" : 10
        },
        {
            "date" : ISODate("2012-04-30T00:00:00Z"),
            "grade" : "A",
            "score" : 11
        }
    ],
    "name" : "Club Macanudo (Cigar Bar)",
    "restaurant_id" : "40526406"
}
>
```

24)

```
C:\Windows\System32\cmd.exe - mongo
    "restaurant_id" : "40526406"
}
> db.addresses.find({$and:[{"address.coord.1":{$gt:42}},{"address.coord.1":{$lte:52}}]}, {_id:0,restaurant_id:1,name:1,address:1})
{
  "address" : { "building" : "47", "coord" : [ -78.877224, 42.8954619999999 ], "street" : "Broadway @ Trinity Pl", "zipcode" : "10006" }, "name" : "T.G.I. Friday'S", "restaurant_id" : "40387999"
}
{
  "address" : { "building" : "1", "coord" : [ -0.7119979, 51.6514664 ], "street" : "Pennplaza E, Penn Sta", "zipcode" : "10001" }, "name" : "T.G.I. Fridays", "restaurant_id" : "40388936"
}
{
  "address" : { "building" : "3000", "coord" : [ -87.8656769999999, 42.6115092000001 ], "street" : "47 Avenue", "zipcode" : "11101" }, "name" : "Di Luvio'S Deli", "restaurant_id" : "4040228A"
}
{
  "address" : { "building" : "21972199", "coord" : [ -78.589606, 42.8912372 ], "street" : "Broadway", "zipcode" : "10024" }, "name" : "La Caridad 78", "restaurant_id" : "40568285"
}
{
  "address" : { "building" : "7981", "coord" : [ -84.9751215, 45.4713351 ], "street" : "Hoyt Street", "zipcode" : "11201" }, "name" : "Bijan'S", "restaurant_id" : "40876618"
}
{
  "address" : { "building" : "0", "coord" : [ -88.0778799, 42.4154769 ], "street" : "& Grand Central", "zipcode" : "10017" }, "name" : "Hyatt, My Central/Room Service", "restaurant_id" : "40879243"
}
{
  "address" : { "building" : "66", "coord" : [ -111.9975205, 42.0870258 ], "street" : "West Side Highway", "zipcode" : "10006" }, "name" : "Sports Center At Chelsea Piers (Sushi Bar)", "restaurant_id" : "40882356"
}
>
```

25)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({}, {_id:0, name:1}).sort({name:1}).pretty()
{
  "name" : "(Lewis Drug Store) Locanda Vini E Olio"
}
{
  "name" : "1 East 66Th Street Kitchen"
}
{
  "name" : "101 Deli"
}
{
  "name" : "101 Restaurant And Bar"
}
{
  "name" : "1020 Bar"
}
{
  "name" : "104-01 Foster Avenue Coffee Shop(Ups)"
}
{
  "name" : "10Th Avenue Pizza & Cafe"
}
{
  "name" : "111 Restaurant"
}
{
  "name" : "15 East Restaurant"
}
{
  "name" : "200 Fifth Avenue Restaurant & Sports Bar"
}
{
  "name" : "21 Club"
}
{
  "name" : "2A"
}
{
  "name" : "Deli & Grill"
}
{
  "name" : "Guys"
}
{
  "name" : "3 Guys Restaurant"
}
{
  "name" : "42Nd Street Pizza Diner"
}
{
  "name" : "44 & X Hell'S Kitchen"
}
{
  "name" : "44 Sv Ristorante & Bar"
}
{
  "name" : "5 Burro Cafe"
}
{
  "name" : "525 Lex Restaurant & Bar"
}
Type "it" for more
>
```

26)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({}, { _id: 0, name: 1 }).sort({ name: -1 }).pretty()
{
  "name": "Zum Stammtisch"
}
{
  "name": "Zum Schneider"
}
{
  "name": "Zorba's"
}
{
  "name": "Zebu Grill"
}
{
  "name": "Zaro's Bread Basket"
}
{
  "name": "Zaro's Bakery"
}
{
  "name": "Zaro's Bakery"
}
{
  "name": "Zaf's Luncheonette"
}
{
  "name": "Yvonne Yvonne Restaurant"
}
{
  "name": "Yura & Company On Madison"
}
{
  "name": "Yummy Kitchen"
}
{
  "name": "Your Bakery"
}
{
  "name": "Yonah Shimmel's Knishes"
}
{
  "name": "Volanda Pizzeria Restaurant"
}
{
  "name": "Vip's"
}
{
  "name": "Yen Yen Restaurant"
}
>
type "it" for more
```

27)

28)

```
C:\Windows\System32\cmd.exe - mongo
{
  "borough" : "Staten Island", "cuisine" : "American "
}
{
  "borough" : "Staten Island", "cuisine" : "American "
}
Type "it" for more
> db.addresses.find({"address.street":{$regex:/Street/}}).pretty()
{
  "_id" : ObjectId("6107f9163476e6db06d98286"),
  "address" : {
    "building" : "1",
    "coord" : [
      -73.96926900999999,
      40.7685235
    ],
    "street" : "East 66 Street",
    "zipcode" : "10065"
  },
  "borough" : "Manhattan",
  "cuisine" : "American",
  "grades" : [
    {
      "date" : ISODate("2014-05-07T00:00:00Z"),
      "grade" : "A",
      "score" : 3
    },
    {
      "date" : ISODate("2013-05-03T00:00:00Z"),
      "grade" : "A",
      "score" : 4
    },
    {
      "date" : ISODate("2012-04-30T00:00:00Z"),
      "grade" : "A",
      "score" : 6
    },
    {
      "date" : ISODate("2011-12-27T00:00:00Z"),
      "grade" : "A",
      "score" : 0
    }
  ],
  "name" : "1 East 66th Street Kitchen",
  "restaurant_id" : "40359480"
}
{
  "_id" : ObjectId("6107f9163476e6db06d98288"),
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  }
}
{
  "address" : {
    "building" : "469",
    "coord" : [
      -73.961704,
      40.662942
    ],
    "street" : "Flatbush Avenue",
    "zipcode" : "11225"
  }
}
{
  "address" : {
    "building" : "8825",
    "coord" : [
      -73.8803827,
      40.7643124
    ],
    "street" : "Astoria Boulevard",
    "zipcode" : "11369"
  }
}
{
  "address" : {
    "building" : "97-22",
    "coord" : [
      -73.8601152,
      40.7311739
    ],
    "street" : "63 Road",
    "zipcode" : "11374"
  }
}
{
  "address" : {
    "building" : "2206",
    "coord" : [
      -74.1377286,
      40.6119572
    ],
    "street" : "Victory Boulevard",
    "zipcode" : "10314"
  }
}
{
  "address" : {
    "building" : "7114",
    "coord" : [
      -73.9968586,
      40.6190834
    ],
    "street" : "Avenue U",
    "zipcode" : "11234"
  }
}
{
  "address" : {
    "building" : "1830",
    "coord" : [
      -73.9482606,
      40.6408271
    ],
    "street" : "Nostrand Avenue",
    "zipcode" : "11226"
  }
}
{
  "address" : {
    "building" : "2780",
    "coord" : [
      -73.98241999999999,
      40.579505
    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
  }
}
{
  "address" : {
    "building" : "2300",
    "coord" : [
      -73.8786113,
      40.8502883
    ],
    "street" : "Southern Boulevard",
    "zipcode" : "10460"
  }
}
{
  "address" : {
    "building" : "7715",
    "coord" : [
      -73.9973325,
      40.61174889999999
    ],
    "street" : "18 Avenue",
    "zipcode" : "11214"
  }
}
{
  "address" : {
    "building" : "1269",
    "coord" : [
      -73.871194,
      40.6730975
    ],
    "street" : "Sutter Avenue",
    "zipcode" : "11208"
  }
}
{
  "address" : {
    "building" : "705",
    "coord" : [
      -73.9653967,
      40.6064339
    ],
    "street" : "Kings Highway",
    "zipcode" : "11223"
  }
}
{
  "address" : {
    "building" : "1",
    "coord" : [
      -73.96926900999999,
      40.7685235
    ],
    "street" : "East 66 Street",
    "zipcode" : "10065"
  }
}
{
  "address" : {
    "building" : "6409",
    "coord" : [
      -74.00528899999999,
      40.628886
    ],
    "street" : "11 Avenue",
    "zipcode" : "11219"
  }
}
{
  "address" : {
    "building" : "351",
    "coord" : [
      -73.98513599999999,
      40.7676919
    ],
    "street" : "West 57 Street",
    "zipcode" : "10019"
  }
}
{
  "address" : {
    "building" : "203",
    "coord" : [
      -73.9782040000001,
      40.6435254
    ],
    "street" : "Church Avenue",
    "zipcode" : "11218"
  }
}
{
  "address" : {
    "building" : "6909",
    "coord" : [
      -74.0259567,
      40.6353674
    ],
    "street" : "3 Avenue",
    "zipcode" : "11209"
  }
}
{
  "address" : {
    "building" : "265-15",
    "coord" : [
      -73.7032601,
      40.7386417
    ],
    "street" : "Hillside Avenue",
    "zipcode" : "11004"
  }
}
{
  "address" : {
    "building" : "284",
    "coord" : [
      -73.9829239,
      40.6580753
    ],
    "street" : "Prospect Park West",
    "zipcode" : "11215"
  }
}
{
  "address" : {
    "building" : "129-08",
    "coord" : [
      -73.839297,
      40.78147
    ],
    "street" : "20 Avenue",
    "zipcode" : "11356"
  }
}
Type "it" for more
11:21 PM
ENG
02-Aug-21
```

29)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"address.coord":{$type:"double"}}, { id:0,address:1})
{
  "address" : {
    "building" : "1007",
    "coord" : [
      -73.856077,
      40.848447
    ],
    "street" : "Morris Park Ave",
    "zipcode" : "10462"
  }
}
{
  "address" : {
    "building" : "469",
    "coord" : [
      -73.961704,
      40.662942
    ],
    "street" : "Flatbush Avenue",
    "zipcode" : "11225"
  }
}
{
  "address" : {
    "building" : "8825",
    "coord" : [
      -73.8803827,
      40.7643124
    ],
    "street" : "Astoria Boulevard",
    "zipcode" : "11369"
  }
}
{
  "address" : {
    "building" : "97-22",
    "coord" : [
      -73.8601152,
      40.7311739
    ],
    "street" : "63 Road",
    "zipcode" : "11374"
  }
}
{
  "address" : {
    "building" : "2206",
    "coord" : [
      -74.1377286,
      40.6119572
    ],
    "street" : "Victory Boulevard",
    "zipcode" : "10314"
  }
}
{
  "address" : {
    "building" : "7114",
    "coord" : [
      -73.9968586,
      40.6190834
    ],
    "street" : "Avenue U",
    "zipcode" : "11234"
  }
}
{
  "address" : {
    "building" : "1830",
    "coord" : [
      -73.9482606,
      40.6408271
    ],
    "street" : "Nostrand Avenue",
    "zipcode" : "11226"
  }
}
{
  "address" : {
    "building" : "2780",
    "coord" : [
      -73.98241999999999,
      40.579505
    ],
    "street" : "Stillwell Avenue",
    "zipcode" : "11224"
  }
}
{
  "address" : {
    "building" : "2300",
    "coord" : [
      -73.8786113,
      40.8502883
    ],
    "street" : "Southern Boulevard",
    "zipcode" : "10460"
  }
}
{
  "address" : {
    "building" : "7715",
    "coord" : [
      -73.9973325,
      40.61174889999999
    ],
    "street" : "18 Avenue",
    "zipcode" : "11214"
  }
}
{
  "address" : {
    "building" : "1269",
    "coord" : [
      -73.871194,
      40.6730975
    ],
    "street" : "Sutter Avenue",
    "zipcode" : "11208"
  }
}
{
  "address" : {
    "building" : "705",
    "coord" : [
      -73.9653967,
      40.6064339
    ],
    "street" : "Kings Highway",
    "zipcode" : "11223"
  }
}
{
  "address" : {
    "building" : "1",
    "coord" : [
      -73.96926900999999,
      40.7685235
    ],
    "street" : "East 66 Street",
    "zipcode" : "10065"
  }
}
{
  "address" : {
    "building" : "6409",
    "coord" : [
      -74.00528899999999,
      40.628886
    ],
    "street" : "11 Avenue",
    "zipcode" : "11219"
  }
}
{
  "address" : {
    "building" : "351",
    "coord" : [
      -73.98513599999999,
      40.7676919
    ],
    "street" : "West 57 Street",
    "zipcode" : "10019"
  }
}
{
  "address" : {
    "building" : "203",
    "coord" : [
      -73.9782040000001,
      40.6435254
    ],
    "street" : "Church Avenue",
    "zipcode" : "11218"
  }
}
{
  "address" : {
    "building" : "6909",
    "coord" : [
      -74.0259567,
      40.6353674
    ],
    "street" : "3 Avenue",
    "zipcode" : "11209"
  }
}
{
  "address" : {
    "building" : "265-15",
    "coord" : [
      -73.7032601,
      40.7386417
    ],
    "street" : "Hillside Avenue",
    "zipcode" : "11004"
  }
}
{
  "address" : {
    "building" : "284",
    "coord" : [
      -73.9829239,
      40.6580753
    ],
    "street" : "Prospect Park West",
    "zipcode" : "11215"
  }
}
{
  "address" : {
    "building" : "129-08",
    "coord" : [
      -73.839297,
      40.78147
    ],
    "street" : "20 Avenue",
    "zipcode" : "11356"
  }
}
Type "it" for more
11:26 PM
ENG
02-Aug-21
```

30)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({"grades":{$elemMatch:{'score':{$mod:[7,0]}}}}, {_id:0,restaurant_id:1,name:1,grades:1}).pretty()
{
  "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"
}
{
  "grades" : [
    {
      "date" : ISODate("2014-11-15T00:00:00Z"),
      "grade" : "Z",
      "score" : 38
    },
    {
      "date" : ISODate("2014-05-02T00:00:00Z"),
      "grade" : "A",
      "score" : 10
    }
  ],
  "name" : "Omonia Cafe"
}
11:30 PM
ENG 02-Aug-21
```

31)

```
Select C:\Windows\System32\cmd.exe - mongo
Type "it" for more
> db.addresses.find({name:{$regex:/mon/}}, { id:0, name:1, borough:1, "address.coord":1, cuisine:1})
{
  "address" : { "coord" : [-73.993060999999, 40.7441419] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Desmond'S Tavern" }
  "address" : { "coord" : [-73.8221418, 40.7272376] }, "borough" : "Queens", "cuisine" : "Jewish/Kosher", "name" : "Shimons Kosher Pizza" }
  "address" : { "coord" : [-74.1046559999999, 40.58834] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club" }
  "address" : { "coord" : [-73.9812843, 40.5947365] }, "borough" : "Brooklyn", "cuisine" : "Pizza/Italian", "name" : "Lb Spumoni Gardens" }
  "address" : { "coord" : [-73.951199, 40.7166026] }, "borough" : "Brooklyn", "cuisine" : "Italian", "name" : "Bamonte'S Restaurant" }
  "address" : { "coord" : [-73.924072, 40.76188900000001] }, "borough" : "Queens", "cuisine" : "Greek", "name" : "Omonia Cafe" }
  "address" : { "coord" : [-73.9901695, 40.7526176] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Delmonico'S Kitchen" }
  "address" : { "coord" : [-73.9707595, 40.7635651] }, "borough" : "Manhattan", "cuisine" : "Delicatessen", "name" : "Delmonico Gourmet" }
  "address" : { "coord" : [-73.9760637, 40.7508686] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Delmonico Gourmet" }
  "address" : { "coord" : [-73.9719820999999, 40.764464] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Harmonie Club" }
  "address" : { "coord" : [-73.79571998000001, 40.7895637] }, "borough" : "Queens", "cuisine" : "Bakery", "name" : "Ramona'S Bakery" }
  "address" : { "coord" : [-73.98465480000001, 40.7630755] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Neil Simon Theatre" }
  "address" : { "coord" : [-74.028486, 40.630438] }, "borough" : "Brooklyn", "cuisine" : "Mediterranean", "name" : "Omonia Cafe" }
  "address" : { "coord" : [-73.9849976, 40.7276766] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Simone Bar Cafe" }
  "address" : { "coord" : [-74.0103233999999, 40.7050156] }, "borough" : "Manhattan", "cuisine" : "Italian", "name" : "Delmonicos" }
  "address" : { "coord" : [-73.8706606, 40.7342757] }, "borough" : "Queens", "cuisine" : "American ", "name" : "Cinnabon World Famous Cinnamon Rolls" }
  "address" : { "coord" : [-73.9646299, 40.807001] }, "borough" : "Manhattan", "cuisine" : "American ", "name" : "Ferris Booth Commons - Alfred Lerner Hall" }
  "address" : { "coord" : [-74.112758, 40.5833299] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club" }
  "address" : { "coord" : [-74.1110561, 40.5884772] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club(10Th Hole)" }
  "address" : { "coord" : [-74.1046559999999, 40.58834] }, "borough" : "Staten Island", "cuisine" : "American ", "name" : "Richmond County Country Club - Pool Snack Bar" }
Type "it" for more
> -
```

32)

```
C:\Windows\System32\cmd.exe - mongo
> db.addresses.find({name:{$regex:/"^Mad.*"/}}, { id:0, name:2, borough:1, "address.coord":1, cuisine:1})
[{"address": { "coord": [-73.9866597, 40.7431194] }, "borough": "Manhattan", "cuisine": "American", "name": "Madison Square" },
 {"address": { "coord": [-73.9830219999999, 40.742313] }, "borough": "Manhattan", "cuisine": "Indian", "name": "Madras Mahal" },
 {"address": { "coord": [-74.000002, 40.72735] }, "borough": "Manhattan", "cuisine": "American", "name": "Madame X" },
 {"address": { "coord": [-73.9817195999999, 40.7499486] }, "borough": "Manhattan", "cuisine": "French", "name": "Madison Bistro" },
 {"address": { "coord": [-73.9717845, 40.6897199] }, "borough": "Brooklyn", "cuisine": "African", "name": "Madiba" },
 {"address": { "coord": [-73.9849753, 40.9069811] }, "borough": "Bronx", "cuisine": "Italian", "name": "Madison'S" },
 {"address": { "coord": [-73.9886598, 40.7565811] }, "borough": "Manhattan", "cuisine": "Hotdogs", "name": "Madame Tussaud'S" },
 {"address": { "coord": [-73.9562371999999, 40.7761697] }, "borough": "Manhattan", "cuisine": "American", "name": "Mad River Bar & Grille" }]
```