

MongoDB – Complex Queries

MongoDB Exercises – With the Restaurants Data Set

1. Downloaded the file
2. Unzipped the file
3. Running server
4. Importing json file
5. Mongod, mongo
6. Show dbs
7. Use restaurants
8. `Db.addresses.find().pretty()`

Exercise Questions

1. `Db.addresses.find()`
2. `Db.addresses.find(_id:1, name:1, cuisine:1, borough:1, restaurant_id:1)`
3. `Db.addresses.find(_id:0, name:1, cuisine:1, borough:1, restaurant_id:1)`
4. `db.addresses.find({}, {_id:0, name:1, cuisine: 1, borough: 1, restaurant_id: 1, "address.zipcode": 1})`
5. `db.addresses.find({"borough":"Bronx"}).pretty().limit(5)`
6. `db.addresses.find({"borough":"Bronx"}).pretty()`
7. `db.addresses.find({"borough":"Bronx"}).pretty().skip(5).limit(5)`
8. `db.addresses.find({"grades.score":{$gt:90}})`
9. `db.addresses.find({$and: [{"grades.score":{$gt:80}}, {"grades.score":{$lt:100}]})`
10. `db.addresses.find({"address.coord.0":{$lt:-95.754168}})`
11. `db.addresses.find ({$and:[{"cuisine":{$ne:"American"}}, {"address.coord.0":{$lt:-65.754168}}, {"grades.score":{$gt:70}}]).pretty()`
12. `db.addresses.find({$and : [{"cuisine" : {$ne : "American "}}, {"address.coord.1" : {$lt : -65.754168}}, {"grades.score" : {$gt : 70}}]})`
13. `db.addresses.find({$and:[{"cuisine":{$ne:"American"}}, {"grades.grade":"A"}, {"borough":{$ne:"Brooklyn"}}]).sort({cuisine:-1}).pretty()`
14. `db.addresses.find({"name" : { $regex: /^Wil.*$/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`
15. `db.addresses.find({"name" : { $regex: /. *ces$/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`
16. `db.addresses.find({"name" : { $regex: /Reg/}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`
17. `db.addresses.find({borough: "Bronx", cuisine: {$in: ["American ", "Chinese"]}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`
18. `db.addresses.find({$or: [{"borough": "Staten Island"}, {"borough": "Bronx or Brooklyn"}, {"borough": "Queens"}]}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`
19. `db.addresses.find({borough: {$nin: ["Staten Island", "Queens", "Bronx", "Brooklyn"]}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})`

20. db.addresses.find({"grades.score": {\$lte: 10}}, {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
21. db.addresses.find({\$nor: [{cuisine: {\$in: ["American ", "Chinese"]}}, {name: /^Wil.*\/}], {_id:0, restaurant_id:1, name:1, borough:1, cuisine:1})
22. 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})
23. 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()
24. db.addresses.find({\$and : [{"address.coord.1": {\$gt : 42}}, {"address.coord.1": {\$lte : 52}}]}, {_id:0, restaurant_id:1, name:1, address:1})
25. db.addresses.find({}, {_id:0, name:1}).sort({name: 1})
26. db.addresses.find({}, {_id:0, name:1}).sort({name: -1})
27. db.addresses.find({}, {_id:0, cuisine:1, borough:1}).sort({cuisine: 1, borough: -1})
28. db.addresses.find({"address.street":{\$regex:/Street/}}).pretty() – With Street
db.addresses.find({"address.street":{\$ne:{\$regex:/Street/}}}).pretty() – Without Street.
29. db.addresses.find({"address.coord": {\$type: "double"}}, {_id:0, address:1})
30. db.addresses.find({"grades": {\$elemMatch: {"score": {\$mod: [7,0]}}}}, {_id:0, restaurant_id:1, name:1, grades:1})
31. db.addresses.find({name: {\$regex: /mon/}}, {_id:0, name:1, borough:1, "address.coord":1, cuisine:1})
32. db.addresses.find({name: {\$regex: /^Mad.*\/}}, {_id:0, name:1, borough:1, "address.coord":1, cuisine:1})