Mongodb exrcise

<https://www.w3resource.com/mongodb-exercises/#MongoDB_restaurants>

# MongoDB query exercise

working with Chinh Le @ https://github.com/ldchinhcr

1. display all the documents in the collection restaurants.

```db.rest.find()```

2. display the fields restaurant\_id, name, borough and cuisine for all the documents in the collection restaurant.

```db.rest.find({}, {\_id:1, name:1, cuisine: 1, borough: 1, restaurant\_id: 1})```

3. display the fields restaurant\_id, name, borough and cuisine, but exclude the field \_id for all the documents in the collection restaurant.

```db.rest.find({}, {\_id:0, name:1, cuisine: 1, borough: 1, restaurant\_id: 1})```

4. display the fields restaurant\_id, name, borough and zip code, but exclude the field \_id for all the documents in the collection restaurant.

```db.rest.find({}, {\_id:0, name:1, cuisine: 1, borough: 1, restaurant\_id: 1, "address.zipcode": 1})```

5. display all the restaurant which is in the borough Bronx.

``` db.rest.find({"borough" : "Bronx"}).pretty()```

6. display the first 5 restaurant which is in the borough Bronx.

```db.rest.find({"borough" : "Bronx"}).limit(5)```

7. display the next 5 restaurants after skipping first 5 which are in the borough Bronx.

```db.rest.find({"borough" : "Bronx"}).skip(5).limit(5)```

8. find the restaurants who achieved a score more than 90.

```db.rest.find({"grades.score" : {"$gt" : 90}})```

9. find the restaurants that achieved a score, more than 80 but less than 100.

```db.rest.find({$and : [{"grades.score" : {"$gt" : 90}},{"grades.score" : {"$lt" : 100}}]})```

10. find the restaurants which locate in latitude value less than -95.754168.

```db.rest.find({"address.coord.0" : {$lt : -95.754168}})```

11. find the restaurants that do not prepare any cuisine of 'American' and their grade score more than 70 and latitude less than -65.754168.

```db.rest.find({$and : [{"cuisine" : {$ne : "American "}}, {"address.coord.0" : {$lt : -65.754168}}, {"grades.score" : {$gt : 70}}]})```

12. find the restaurants which do not prepare any cuisine of 'American' and achieved a score more than 70 and located in the longitude less than -65.754168.

Note : Do this query without using $and operator.

```db.rest.find({$and : [{"cuisine" : {$ne : "American "}}, {"address.coord.1" : {$lt : -65.754168}}, {"grades.score" : {$gt : 70}}]})```

13. find the restaurants which do not prepare any cuisine of 'American ' and achieved a grade point 'A' not belongs to the borough Brooklyn. The document must be displayed according to the cuisine in descending order.

```db.rest.find({$and : [{"cuisine" : {$ne : "American "}}, {"grades.grade" : "A"}, {"borough" : {$ne : "Brooklyn "}}]}).sort({cuisine : -1})```

14. find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Wil' as first three letters for its name.

```db.rest.find({"name" : { $regex: /^Wil.\*/}}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

15. find the restaurant Id, name, borough and cuisine for those restaurants which contain 'ces' as last three letters for its name.

```db.rest.find({"name" : { $regex: /.\*ces$/}}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

16. find the restaurant Id, name, borough and cuisine for those restaurants which contain 'Reg' as three letters somewhere in its name.

```db.rest.find({"name" : { $regex: /Reg/}}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

17. find the restaurants which belong to the borough Bronx and prepared either American or Chinese dish.

```db.rest.find({borough: "Bronx", cuisine: {$in: ["American ","Chinese"]}}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

18. find the restaurant Id, name, borough and cuisine for those restaurants which belong to the borough Staten Island or Queens or Bronxor Brooklyn.

```db.rest.find({$or: [{"borough": "Staten Island"}, {"borough": "Bronxor Brooklyn"}, {"borough": "Queens"}]}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

19. find the restaurant Id, name, borough and cuisine for those restaurants which are not belonging to the borough Staten Island or Queens or Bronxor Brooklyn.

```db.rest.find( {borough: {$nin: ["Staten Island","Queens","Bronx","Brooklyn"]}} , {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

20. find the restaurant Id, name, borough and cuisine for those restaurants which achieved a score which is not more than 10.

```db.rest.find({"grades.score": {$lte: 10}}, {\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

21. find the restaurant Id, name, borough and cuisine for those restaurants which prepared dish except 'American' and 'Chinese' or restaurant's name begins with letter 'Wil'.

```db.rest.find({$nor: [{cuisine: {$in: ["American ","Chinese"]}},{name: /^Wil.\*/}]},{\_id:0, restaurant\_id:1, name:1, borough:1, cuisine:1})```

22. find the restaurant Id, name, and grades for those restaurants which achieved a grade of "A" and scored 11 on an ISODate "2014-08-11T00:00:00Z" among many of survey dates..

```db.rest.find({"grades" : {$elemMatch: {"date": ISODate("2014-08-11T00:00:00Z"), "grade":"A", "score":11}}}, {\_id:0, restaurant\_id:1, name:1, grades:1})```

23. find the restaurant Id, name and grades for those restaurants where the 2nd element of grades array contains a grade of "A" and score 9 on an ISODate "2014-08-11T00:00:00Z".

```db.rest.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. find the restaurant Id, name, address and geographical location for those restaurants where 2nd element of coord array contains a value which is more than 42 and upto 52..

```db.rest.find({$and : [{"address.coord.1": {$gt : 42}},{"address.coord.1": {$lte : 52}}]}, {\_id:0, restaurant\_id:1, name:1, address:1})```

25. arrange the name of the restaurants in ascending order along with all the columns.

```db.rest.find({},{\_id:0, name:1}).sort( {name: 1})```

26. arrange the name of the restaurants in descending along with all the columns.

```db.rest.find({},{\_id:0, name:1}).sort( {name: -1})```

27. arranged the name of the cuisine in ascending order and for that same cuisine borough should be in descending order.

```db.rest.find({}, {\_id:0, cuisine:1, borough:1}).sort({cuisine: 1, borough: -1})```

28. know whether all the addresses contains the street or not.

```

With Street:

db.rest.find({"address.street": {$regex: /Street/}}).pretty()

```

```

Not with street:

db.rest.find({"address.street": {$ne: {$regex: /Street/}}}).pretty()

```

29. Write a MongoDB query which will select all documents in the restaurants collection where the coord field value is Double.

```db.rest.find({"address.coord": {$type: "double"}}, {\_id:0, address:1})```

30. Write a MongoDB query which will select the restaurant Id, name and grades for those restaurants which returns 0 as a remainder after dividing the score by 7.

```db.rest.find({"grades": {$elemMatch: {"score": {$mod: [7,0]}}}},{\_id:0, restaurant\_id:1, name:1, grades:1})```

31. find the restaurant name, borough, longitude and attitude and cuisine for those restaurants which contains 'mon' as three letters somewhere in its name.

```db.rest.find({name: {$regex: /mon/}},{\_id:0, name:1, borough:1, "address.coord":1, cuisine:1})```

32. find the restaurant name, borough, longitude and latitude and cuisine for those restaurants which contain 'Mad' as first three letters of its name.

```db.rest.find({name: {$regex: /^Mad.\*/}},{\_id:0, name:1, borough:1, "address.coord":1, cuisine:1})```