

MongoDB Assignment

Name :Rohan Jain T B

1. display all the documents in the collection restaurants.

```
db.restaurant.find()
```

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

- **db.restaurant.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.restaurant.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.restaurant.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.restaurant.find({"borough" : "Bronx"}).pretty()
```

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

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

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

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

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

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

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

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

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

```
db.restaurant.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.restaurant.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.restaurant.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.restaurant.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.restaurant.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.restaurant.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.restaurant.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.restaurant.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 Bronx or Brooklyn.**

db.restaurant.find({\$or: [{"borough": "Staten Island"}, {"borough": "Bronx or 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 Bronx or Brooklyn.**

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

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

```
db.restaurant.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.restaurant.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.restaurant.find({'address.street': {$regex: /Street/}}).pretty()
```

Not with street:

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