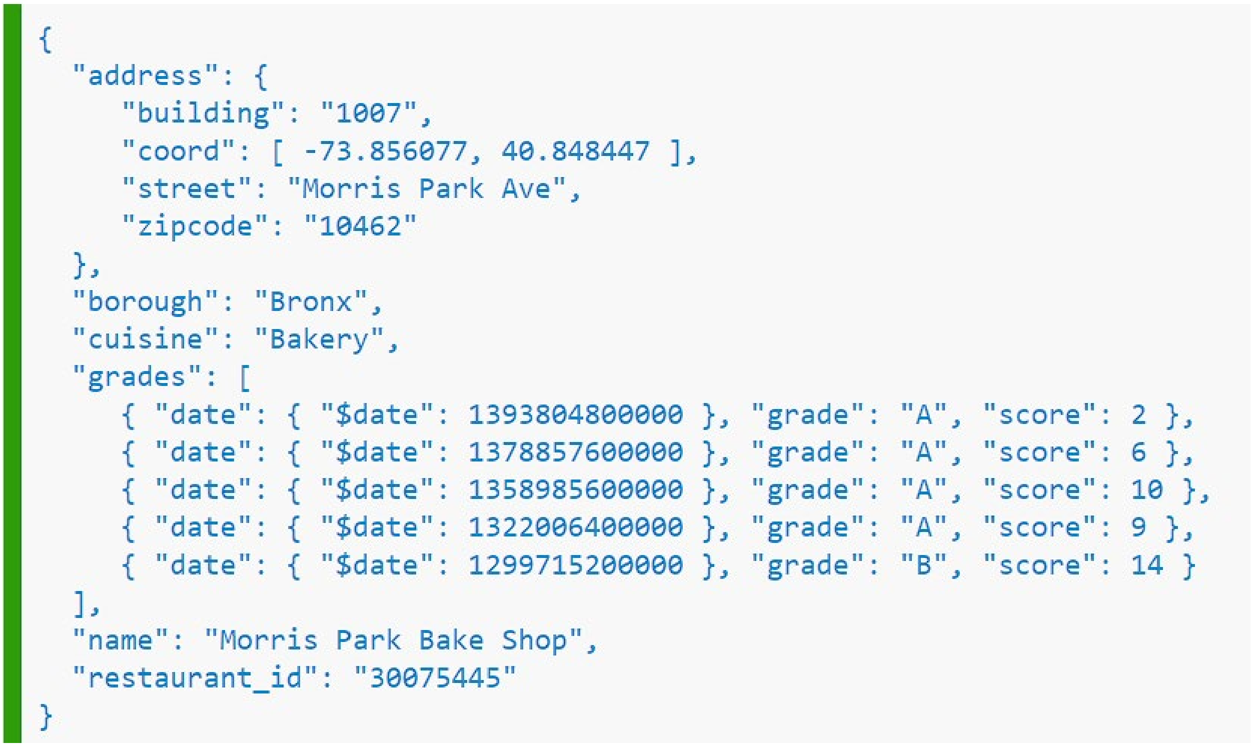
Structure of 'restaurants' collection:



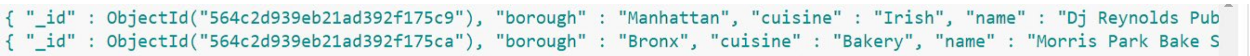
```
{
  "address": {
     "building": "1007",
     "coord": [ -73.856077, 40.848447 ],
     "street": "Morris Park Ave",
     "zipcode": "10462"
  },
  "borough": "Bronx",
  "cuisine": "Bakery",
  "grades": [
     { "date": { "$date": 1393804800000 }, "grade": "A", "score": 2 },
     { "date": { "$date": 1378857600000 }, "grade": "A", "score": 6 },
     { "date": { "$date": 1358985600000 }, "grade": "A", "score": 10 },
     { "date": { "$date": 1322006400000 }, "grade": "A", "score": 9 },
     { "date": { "$date": 1299715200000 }, "grade": "B", "score": 14 }
  ],
  "name": "Morris Park Bake Shop",
  "restaurant_id": "30075445"
}
```

1. Write a MongoDB query to display all the documents in the collection restaurants.

   db.restaurants.find();

2. Write a MongoDB query to display the fields restaurant_id, name, borough and cuisine for all the documents in the collection restaurant.

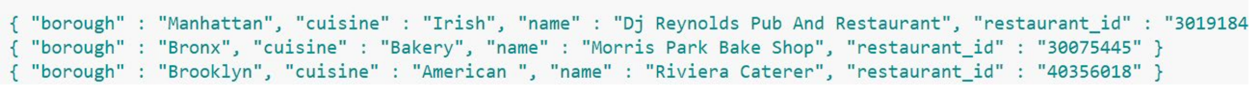
   db.restaurants.find({},{"restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1});



```
{ "_id" : ObjectId("564c2d939eb21ad392f175c9"), "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub
{ "_id" : ObjectId("564c2d939eb21ad392f175ca"), "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake S
```

3. Write a MongoDB query to display the fields restaurant_id, name, borough and cuisine, but exclude the field _id for all the documents in the collection restaurant.

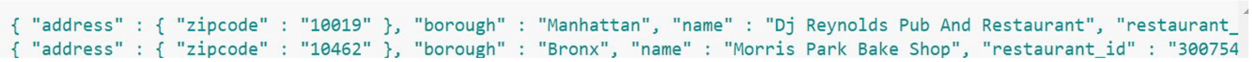
   db.restaurants.find({},{"restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1,"_id":0});



```
{ "borough" : "Manhattan", "cuisine" : "Irish", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_id" : "3019184
{ "borough" : "Bronx", "cuisine" : "Bakery", "name" : "Morris Park Bake Shop", "restaurant_id" : "30075445" }
{ "borough" : "Brooklyn", "cuisine" : "American ", "name" : "Riviera Caterer", "restaurant_id" : "40356018" }
```

4. Write a MongoDB query to display the fields restaurant_id, name, borough and zip code, but exclude the field _id for all the documents in the collection restaurant.

   db.restaurants.find({},{"restaurant_id" : 1,"name":1,"borough":1,"address.zipcode" :1,"_id":0});



```
{ "address" : { "zipcode" : "10019" }, "borough" : "Manhattan", "name" : "Dj Reynolds Pub And Restaurant", "restaurant_
{ "address" : { "zipcode" : "10462" }, "borough" : "Bronx", "name" : "Morris Park Bake Shop", "restaurant_id" : "300754
```

5. Write a MongoDB query to display all the restaurant which is in the borough Bronx.

   db.restaurants.find({"borough": "Bronx"});

6. Write a MongoDB query to display the first 5 restaurant which is in the borough Bronx.

   db.restaurants.find({"borough": "Bronx"}).limit(5);

7. Write a MongoDB query to display the next 5 restaurants after skipping first 5 which are in the borough Bronx.

   db.restaurants.find({"borough": "Bronx"}).skip(5).limit(5);

8. Write a MongoDB query to find the restaurants who achieved a score more than 90.

   db.restaurants.find({grades : { $elemMatch:{"score":{$gt : 90}}}});

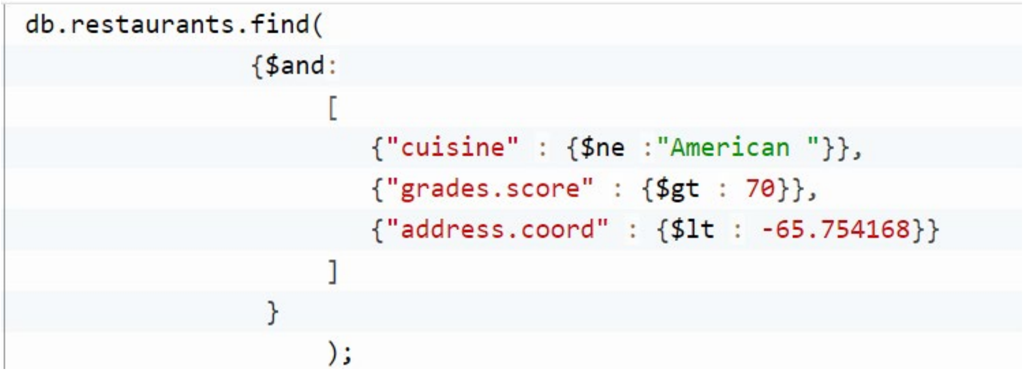
9. Write a MongoDB query to find the restaurants that achieved a score is more than 80 but less than 100.

   db.restaurants.find({grades : { $elemMatch:{"score":{$gt : 80 , $lt :100}}}});

10. Write a MongoDB query to find the restaurants which locate in a latitude value less than -95.754168.

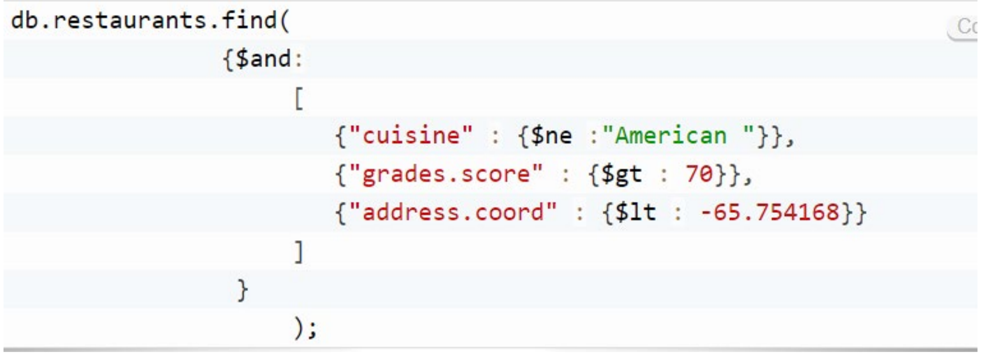
    db.restaurants.find({"address.coord" : {$lt : -95.754168}});

11. Write a MongoDB query to find the restaurants that do not prepare any cuisine of 'American' and their grade score more than 70 and lattitude less than -65.754168.



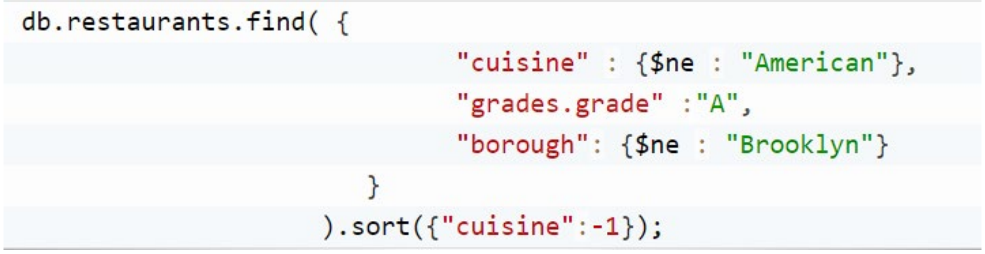
```
db.restaurants.find(
               {$and:
                    [
                       {"cuisine" : {$ne :"American "}},
                       {"grades.score" : {$gt : 70}},
                       {"address.coord" : {$lt : -65.754168}}
                    ]
                }
                  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

12. Write a MongoDB query to 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.



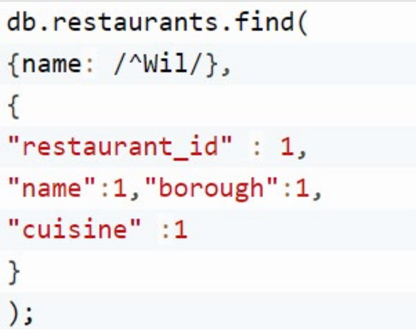
```
db.restaurants.find(
               {$and:
                    [
                       {"cuisine" : {$ne :"American "}},
                       {"grades.score" : {$gt : 70}},
                       {"address.coord" : {$lt : -65.754168}}
                    ]
                }
                  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

13. Write a MongoDB query to 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.



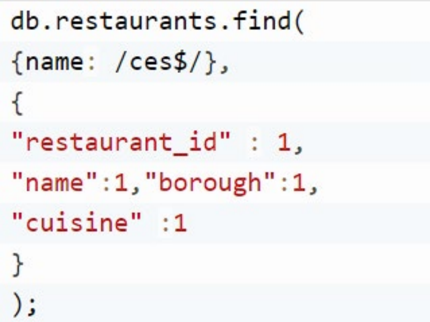
```
db.restaurants.find( {
                              "cuisine" : {$ne : "American"},
                              "grades.grade" :"A",
                              "borough": {$ne : "Brooklyn"}
                       }
                    ).sort({"cuisine":-1});
```

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



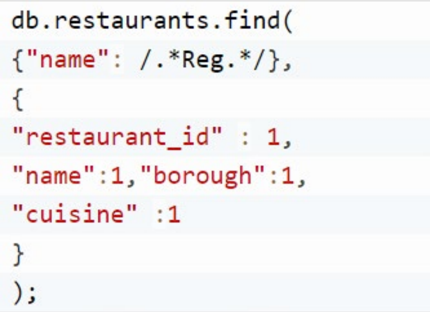
```
db.restaurants.find(
{name: /^Wil/},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

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



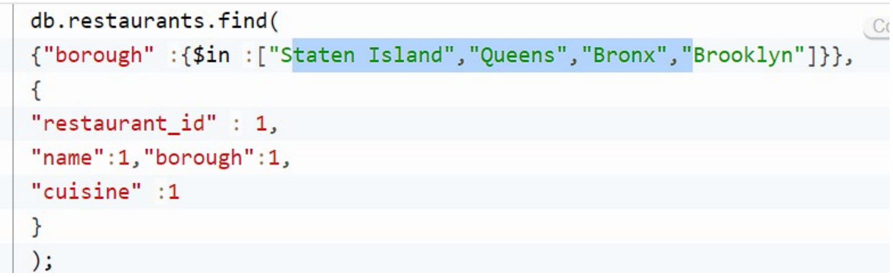
```
db.restaurants.find(
{name: /ces$/},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

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



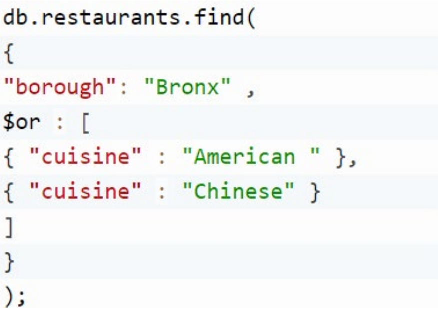
```
db.restaurants.find(
{"name": /.*Reg.*/},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

17. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which belong to the borough Staten Island or Queens or Bronxor Brooklyn.



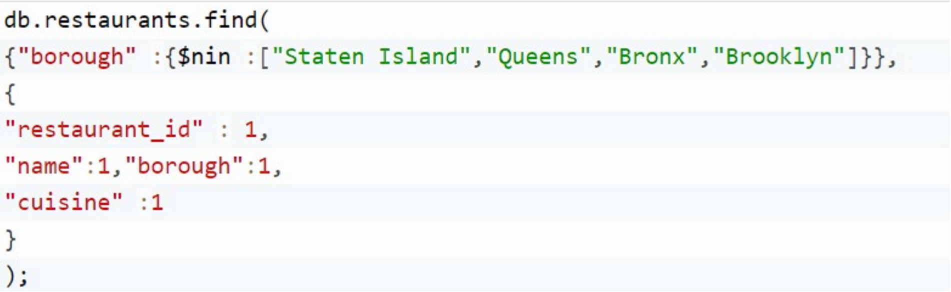
```
db.restaurants.find(
{"borough" :{$in :["Staten Island","Queens","Bronx","Brooklyn"]}},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

18. Write a MongoDB query to find the restaurants which belong to the borough Bronx and prepared either American or Chinese dish.



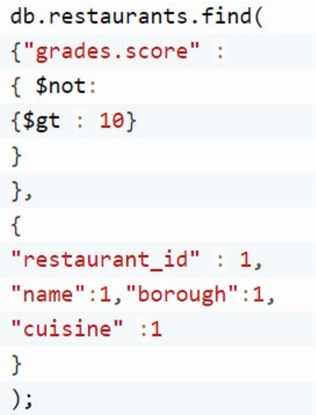
```
db.restaurants.find(
{
"borough": "Bronx" ,
$or : [
{ "cuisine" : "American " },
{ "cuisine" : "Chinese" }
]
}
);
```

19. Write a MongoDB query to 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**.**



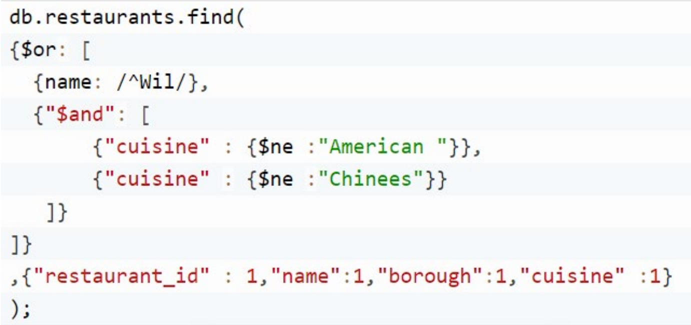
```
db.restaurants.find(
{"borough" :{$nin :["Staten Island","Queens","Bronx","Brooklyn"]}},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

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



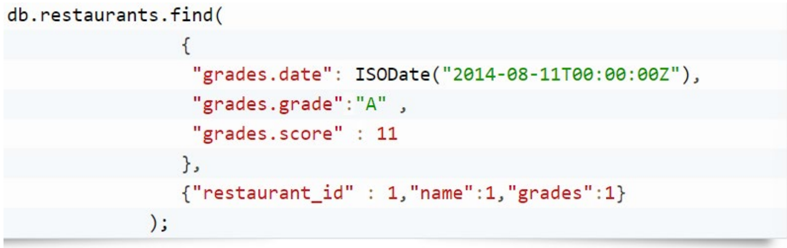
```
db.restaurants.find(
{"grades.score" :
{ $not:
{$gt : 10}
}
},
{
"restaurant_id" : 1,
"name":1,"borough":1,
"cuisine" :1
}
);
```

21. Write a MongoDB query to find the restaurant Id, name, borough and cuisine for those restaurants which prepared dish except 'American' and 'Chinees' or restaurant's name begins with letter 'Wil'.



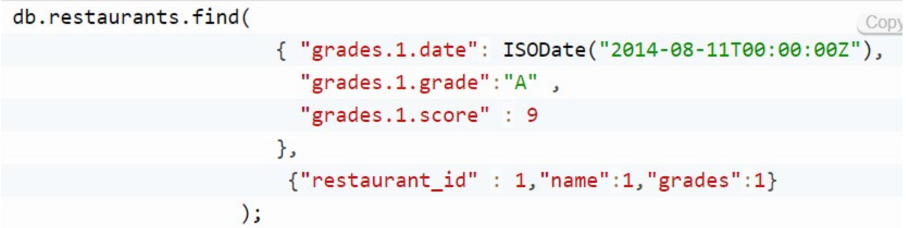
```
db.restaurants.find(
{$or: [
  {name: /^Wil/}, 
  {"$and": [
       {"cuisine" : {$ne :"American "}}, 
       {"cuisine" : {$ne :"Chinees"}}
   ]}
]}
,{"restaurant_id" : 1,"name":1,"borough":1,"cuisine" :1}
);
```

22. Write a MongoDB query to 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.



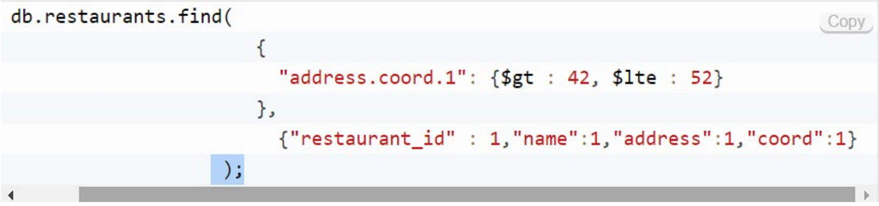
```
db.restaurants.find( 
                { 
                 "grades.date": ISODate("2014-08-11T00:00:00Z"), 
                 "grades.grade":"A" , 
                 "grades.score" : 11
                }, 
                {"restaurant_id" : 1,"name":1,"grades":1}
             );
```

23. Write a MongoDB query to 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.restaurants.find( 
                      { "grades.1.date": ISODate("2014-08-11T00:00:00Z"), 
                        "grades.1.grade":"A" , 
                        "grades.1.score" : 9
                      }, 
                       {"restaurant_id" : 1,"name":1,"grades":1}
                   );
```

24. Write a MongoDB query to 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.restaurants.find( 
                     { 
                       "address.coord.1": {$gt : 42, $lte : 52}
                     }, 
                       {"restaurant_id" : 1,"name":1,"address":1,"coord":1}
                  );
```

25. Write a MongoDB query to arrange the name of the restaurants in ascending order along with all the columns.

db.restaurants.find().sort({"name":1});

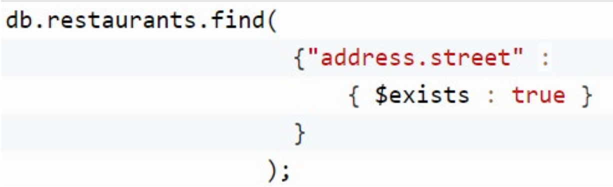
26. Write a MongoDB query to arrange the name of the restaurants in descending along with all the columns.

db.restaurants.find().sort({"name":-1});

27. Write a MongoDB query to arranged the name of the cuisine in ascending order and for that same cuisine borough should be in descending order.

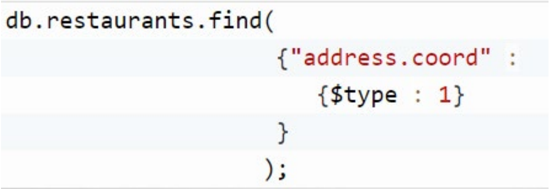
db.restaurants.find().sort({cuisine":1,"borough" : -1,});

28. Write a MongoDB query to know whether all the addresses contains the street or not.



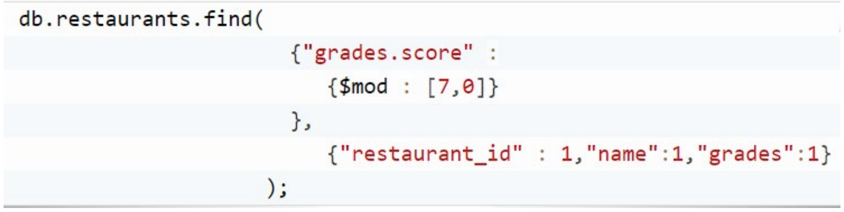
```
db.restaurants.find(
                     {"address.street" :
                         { $exists : true }
                     }
                   );
```

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



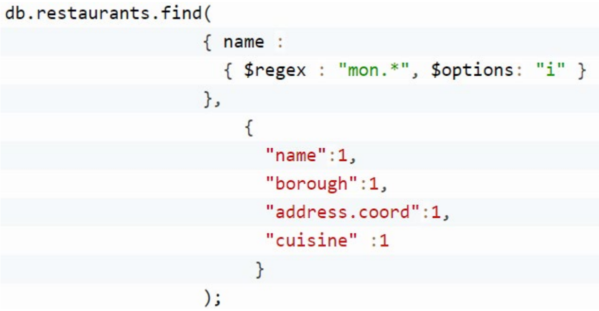
```
db.restaurants.find(
                    {"address.coord" :
                       {$type : 1}
                    }
                   );
```

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**.**



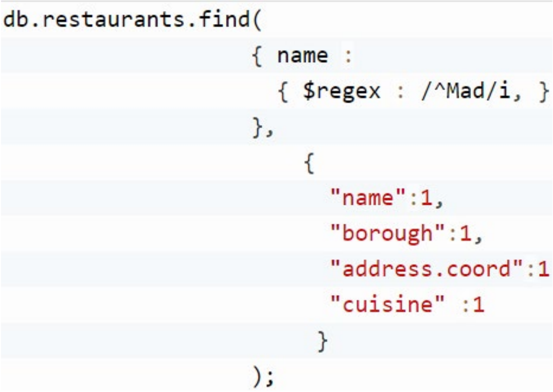
```
db.restaurants.find(
                    {"grades.score" :
                       {$mod : [7,0]}
                    },
                       {"restaurant_id" : 1,"name":1,"grades":1}
                  );
```

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



```
db.restaurants.find(
                    { name :
                      { $regex : "mon.*", $options: "i" }
                    },
                        {
                          "name":1,
                          "borough":1,
                          "address.coord":1,
                          "cuisine" :1
                         }
                    );
```

32. Write a MongoDB query to find the restaurant name, borough, longitude and attitude and cuisine for those restaurants which contain 'Mad' as first three letters of its name.



```
db.restaurants.find(
                   { name :
                     { $regex : /^Mad/i, }
                   },
                       {
                         "name":1,
                         "borough":1,
                         "address.coord":1
                         "cuisine" :1
                        }
                   );
```