

## Exp14

## MONGO DB

```
// =====
```

```
// 1 RESTAURANTS COLLECTION QUERIES
```

```
// =====
```

1 Restaurants except 'American' & 'Chinese' OR name begins with 'Wil'

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

2 Grade "A" and score 11 on 2014-08-11

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

3 2nd element of grades array with grade "A" and score 9 on 2014-08-11

```
db.restaurants.find(
```

```
{
  "grades.1.grade": "A",
  "grades.1.score": 9,
  "grades.1.date": ISODate("2014-08-11T00:00:00Z")
},
{ restaurant_id: 1, name: 1, grades: 1 }
);
```

// 4 2nd coord element between 42 and 52

```
db.restaurants.find(
{
  "address.coord.1": { $gt: 42, $lte: 52 }
},
{ restaurant_id: 1, name: 1, address: 1, "address.coord": 1 }
);
```

// 5 Sort restaurant names ascending

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

// 6 Sort restaurant names descending

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

// 7 Sort cuisine ascending and borough descending

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

// 8 Check whether all addresses have a street field

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

// 9 coord field value is Double

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

// 10 Restaurants with remainder 0 when score divided by 7

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

// 11 Name contains 'mon'

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

// 12 Name starts with 'Mad'

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

// 13 At least one grade < 5

```
db.restaurants.find({ "grades.score": { $lt: 5 } });
```

// 14 Grade < 5 and borough = Manhattan

```
db.restaurants.find({ "grades.score": { $lt: 5 }, borough: "Manhattan" });
```

// 15 Grade < 5 and borough = Manhattan or Brooklyn

```
db.restaurants.find({  
  "grades.score": { $lt: 5 },  
  borough: { $in: ["Manhattan", "Brooklyn"] }  
});
```

// 16 Same as above but cuisine not American

```
db.restaurants.find({  
  "grades.score": { $lt: 5 },
```

```
borough: { $in: ["Manhattan", "Brooklyn"] },  
cuisine: { $ne: "American" }  
});
```

// 17 Same as above but cuisine not American or Chinese

```
db.restaurants.find(  
  "grades.score": { $lt: 5 },  
  borough: { $in: ["Manhattan", "Brooklyn"] },  
  cuisine: { $nin: ["American", "Chinese"] }  
});
```

// 18 Has both score 2 and 6

```
db.restaurants.find(  
  "grades.score": { $all: [2, 6] }  
});
```

// 19 Has scores 2 & 6 and borough Manhattan

```
db.restaurants.find(  
  "grades.score": { $all: [2, 6] },  
  borough: "Manhattan"  
});
```

// 20 Has scores 2 & 6 and borough Manhattan or Brooklyn

```
db.restaurants.find(  
  "grades.score": { $all: [2, 6] },  
  borough: { $in: ["Manhattan", "Brooklyn"] }  
});
```

// 21 Same as above but cuisine not American

```
db.restaurants.find(  
  "grades.score": { $all: [2, 6] },  
  borough: { $in: ["Manhattan", "Brooklyn"] },
```

```
cuisine: { $ne: "American" }  
});
```

```
// 22 Same as above but cuisine not American or Chinese
```

```
db.restaurants.find(  
  "grades.score": { $all: [2, 6] },  
  borough: { $in: ["Manhattan", "Brooklyn"] },  
  cuisine: { $nin: ["American", "Chinese"] }  
});
```

```
// 23 Has grade score 2 or 6
```

```
db.restaurants.find(  
  $or: [  
    { "grades.score": 2 },  
    { "grades.score": 6 }  
  ]  
});
```

```
// =====
```

```
// 🎬 MOVIES COLLECTION QUERIES
```

```
// =====
```

```
// 1 Movies released in 1893
```

```
db.movies.find({ year: 1893 });
```

```
// 2 Movies with runtime > 120
```

```
db.movies.find({ runtime: { $gt: 120 } });
```

```
// 3 Movies with genre "Short"
```

```
db.movies.find({ genres: "Short" });
```

// 4 Movies directed by "William K.L. Dickson"

```
db.movies.find({ directors: "William K.L. Dickson" });
```

// 6 Movies released in USA

```
db.movies.find({ countries: "USA" });
```

// 7 Movies rated "UNRATED"

```
db.movies.find({ rated: "UNRATED" });
```

// 8 IMDb votes > 1000

```
db.movies.find({ "imdb.votes": { $gt: 1000 } });
```

// 9 IMDb rating > 7

```
db.movies.find({ "imdb.rating": { $gt: 7 } });
```

// 10 Tomatoes viewer rating > 4

```
db.movies.find({ "tomatoes.viewer.rating": { $gt: 4 } });
```

// 11 Movies that received an award

```
db.movies.find({ "awards.wins": { $gt: 0 } });
```

// 12 Movies with at least one nomination

```
db.movies.find(  
  { "awards.nominations": { $gte: 1 } },  
  { title: 1, languages: 1, released: 1, directors: 1, writers: 1, awards: 1, year: 1, genres: 1,  
    runtime: 1, cast: 1, countries: 1 }  
);
```

// 13 Movies where cast includes "Charles Kayser"

```
db.movies.find(  
  { cast: "Charles Kayser" },
```

```
    { title: 1, languages: 1, released: 1, directors: 1, writers: 1, awards: 1, year: 1, genres: 1,
      runtime: 1, cast: 1, countries: 1 }
  );
```

```
// 14 Movies released on May 9, 1893
```

```
db.movies.find(
  { released: ISODate("1893-05-09T00:00:00Z") },
  { title: 1, languages: 1, released: 1, directors: 1, writers: 1, countries: 1 }
);
```

```
// 15 Movies having "scene" in the title
```

```
db.movies.find(
  { title: /scene/i },
  { title: 1, languages: 1, released: 1, directors: 1, writers: 1, countries: 1 }
);
```