Exp14   **MONGO DB**

```
// =============================
// 🍽️ RESTAURANTS COLLECTION QUERIES
// =============================


// 1️⃣  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 }
);


// 2️⃣  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 }
);


// 1 1  Name contains 'mon'

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


// 1 2  Name starts with 'Mad'

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


// 1 3  At least one grade < 5

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


// 1 4  Grade < 5 and borough = Manhattan

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


// 1 5  Grade < 5 and borough = Manhattan or Brooklyn

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

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


// 1 6  Same as above but cuisine not American
db.restaurants.find({
  "grades.score": { $lt: 5 },
  borough: { $in: ["Manhattan", "Brooklyn"] },
  cuisine: { $ne: "American" }
});


// 1 7  Same as above but cuisine not American or Chinese
db.restaurants.find({
  "grades.score": { $lt: 5 },
  borough: { $in: ["Manhattan", "Brooklyn"] },
  cuisine: { $nin: ["American", "Chinese"] }
});


// 1 8  Has both score 2 and 6
db.restaurants.find({
  "grades.score": { $all: [2, 6] }
});


// 1 9  Has scores 2 & 6 and borough Manhattan
db.restaurants.find({
  "grades.score": { $all: [2, 6] },
  borough: "Manhattan"
});


// 2 0  Has scores 2 & 6 and borough Manhattan or Brooklyn
db.restaurants.find({
  "grades.score": { $all: [2, 6] },
```

```
    borough: { $in: ["Manhattan", "Brooklyn"] }

});


// 2 1️⃣ Same as above but cuisine not American

db.restaurants.find({

  "grades.score": { $all: [2, 6] },

  borough: { $in: ["Manhattan", "Brooklyn"] },

  cuisine: { $ne: "American" }

});


// 2 2️⃣ 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"] }

});


// 2 3️⃣ Has grade score 2 or 6

db.restaurants.find({

  $or: [

   { "grades.score": 2 },

   { "grades.score": 6 }

  ]

});



// =============================

// 🎬 MOVIES COLLECTION QUERIES

// =============================


// 1️⃣ 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 } });
```

// 1 **1** Movies that received an award

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

// 1 **2** 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 }

);
```

// 1 **3** 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 }

);
```

// 1 **4** 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 }

);
```

// 1 **5** Movies having "scene" in the title

```
db.movies.find(

  { title: /scene/i },

  { title: 1, languages: 1, released: 1, directors: 1, writers: 1, countries: 1 }

);
```