

Ex.No.: 14		MONGO DB
Date:	25/09/2024	

1. 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: [
    { cuisine: { $nin: ["American", "Chinees"] } },
    { name: { $regex: /^Wil/i } }
  ]
},
{
  restaurant_id: 1, name: 1,
  borough: 1,
  cuisine: 1,
  _id: 0
}
);
```



```
>_MONGOSH
< {
  borough: 'Bronx',
  cuisine: 'Bakery',
  name: 'Morris Park Bake Shop',
  restaurant_id: '30075445'
}
{
  borough: 'Bronx',
  cuisine: 'Bakery',
  name: 'Morris Park Bake Shop',
  restaurant_id: 30075445
}
{
  borough: 'Bronx',
  cuisine: 'Italian',
  name: 'Pasta Palace',
  restaurant_id: 30075446
}
{
  borough: 'Manhattan',
  cuisine: 'Chinese',
  name: 'Dragon Wok',
  restaurant_id: 30075447
}
```

2. 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: {
    $elemMatch: { grade:
      "A", score: 11
    }
  }
},
{
  restaurant_id: 1, name: 1,
  grades:
  1,
  _id: 0
} );

```

```

< {
  grades: [
    {
      date: 2014-03-03T00:00:00.003Z,
      grade: 'A',
      score: 3
    },
    {
      date: 2013-09-11T00:00:00.003Z,
      grade: 'A',
      score: 7
    },
    {
      date: 2013-01-24T00:00:00.003Z,
      grade: 'A',
      score: 11
    },
    {
      date: 2011-11-23T00:00:00.003Z,
      grade: 'A',
      score: 5
    },
    {
      date: 2011-03-10T00:00:00.003Z,
      grade: 'B',
      score: 13
    }
  ],

```

3. 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": {
    $elemMatch: { grade: "A",
      score: 9
    }
  }
},
{
  restaurant_id: 1, name: 1,
  grades:
  1,

```

```
    _id: 0
  }
);
```

4. 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,
  _id: 0
}
);
```

5. 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 });
```

SAMPLE OUTPUT:-

```
{
  _id: ObjectId('671b5e6d56ec9972ca8f5dc4'), address: {
    building: 5566, coord: [ -
      73.867377,
      40.854047
    ],
    street: '28th Avenue', zipcode: 10490
  },
  borough: 'Bronx', cuisine:
    'BBQ', grades: [
    {
      date: 2014-03-03T00:00:00.028Z,
      grade: 'A', score: 10
    },
    {
      date: 2013-09-11T00:00:00.028Z,
      grade: 'A', score:
        7 },
    {
      date: 2013-01-24T00:00:00.028Z,
      grade: 'A', score: 11
    },
    {
```

```

    date: 2011-11-23T00:00:00.028Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.028Z, grade:
    'B', score: 15
  }
],
name: 'BBQ Haven',
restaurant_id: 30075473
}
{
  _id: ObjectId('671b5dab56ec9972ca8f5db0'), address: {
    building: 5566, coord: [ -
    73.859377,
    40.850047
  ],
  street: '8th Avenue', zipcode:
  10470
},
borough: 'Manhattan', cuisine:
'French', grades: [
  {
    date: 2014-03-03T00:00:00.008Z,
    grade: 'A', score: 7
  },
  {
    date: 2013-09-11T00:00:00.008Z,
    grade: 'A', score: 9
  },
  {
    date: 2013-01-24T00:00:00.008Z,
    grade: 'A', score: 10
  },
  {
    date: 2011-11-23T00:00:00.008Z,
    grade: 'B', score: 15
  },
  {
    date: 2011-03-10T00:00:00.008Z,
    grade: 'A', score: 6
  }
],
name: 'Bistro Belle', restaurant_id:
30075453
}

```

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

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

SAMPLE OUTPUT

```
{
  _id: ObjectId('671b5e9456ec9972ca8f5dc8'), address: {
    building: 9900, coord: [ -
      73.868977,
      40.854847
    ],
    street: '32nd Avenue', zipcode: 10494
  },
  borough: 'Manhattan', cuisine:
    'Russian', grades: [
    {
      date: 2014-03-03T00:00:00.032Z,
      grade: 'A', score: 10
    },
    {
      date: 2013-09-11T00:00:00.032Z,
      grade: 'B', score: 5
    },
    {
      date: 2013-01-24T00:00:00.032Z,
      grade: 'A', score: 9
    },
    {
      date: 2011-11-23T00:00:00.032Z,
      grade: 'A', score: 8
    },
    {
      date: 2011-03-10T00:00:00.032Z,
      grade: 'A', score: 11
    }
  ],
  name: "Tsar's Table",
  restaurant_id: 30075477
}
{
  _id: ObjectId('671b5e6d56ec9972ca8f5dbe'), address: {
    building: 9900, coord: [ -
      73.864977,
      40.852847
    ],
    street: '22nd Avenue', zipcode: 10484
  },
  borough: 'Bronx', cuisine:
    'Italian', grades: [
    {
      date: 2014-03-03T00:00:00.022Z,
      grade: 'A', score: 8
    },
  ],
```

```
{
  date: 2013-09-11T00:00:00.022Z,
  grade: 'B', score: 5
},
{
  date: 2013-01-24T00:00:00.022Z,
  grade: 'A', score:
  12
},
{
  date: 2011-11-23T00:00:00.022Z,
  grade: 'A', score: 9
},
{
  date: 2011-03-10T00:00:00.022Z,
  grade: 'A', score: 14
}
],
name: 'Trattoria Bella', restaurant_id:
30075467 }
```

7. Write a MongoDB query to arrange 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 });
```

SAMPLE OUTPUT:-

```
{
  _id: ObjectId('671b5d549d3d63480e0a64e9'), address: {
    building: 2233, coord: [ 73.858177,
      40.849447
    ],
    street: '5th Avenue', zipcode:
    10467
  },
  borough: 'Bronx', cuisine:
  'American', grades: [
    {
      date: 2014-03-03T00:00:00.005Z,
      grade: 'A', score: 10
    },
    {
      date: 2013-09-11T00:00:00.005Z,
      grade: 'A', score: 6
    },
    {
```

```
    date: 2013-01-24T00:00:00.005Z,
    grade: 'B', score: 12
  },
  {
    date: 2011-11-23T00:00:00.005Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.005Z,
    grade: 'A', score: 14
  }
],
name: 'Burger Bistro', restaurant_id:
30075450
}
{
  _id: ObjectId('671b5e6d56ec9972ca8f5dc4'), address: {
    building: 5566, coord: [ -
73.867377,
    40.854047
  ],
  street: '28th Avenue', zipcode:
10490
},
borough: 'Bronx', cuisine: 'BBQ',
grades: [
  {
    date: 2014-03-03T00:00:00.028Z,
    grade: 'A', score: 10
  },
  {
    date: 2013-09-11T00:00:00.028Z,
    grade: 'A', score:
7
  },
  {
    date: 2013-01-24T00:00:00.028Z,
    grade: 'A', score: 11
  },
  {
    date: 2011-11-23T00:00:00.028Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.028Z,
    grade: 'B', score:
15
  }
],
name: 'BBQ Haven', restaurant_id:
30075473
}
```

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

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

```
> db.restaurants.find(  
  {  
    "address.street": { $exists: false }  
  }  
);  
<  
Customers >
```

9. 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: "double" }  
  }  
);
```

SAMPLE OUTPUT:-

```
{  
  _id: ObjectId('671b92d339ec8a9bc8b6588b'), address: {  
    building: '1007', coord: [ 73.856077,  
      40.848447  
    ],  
    street: 'Morris Park Ave', zipcode:  
    '10462'  
  },  
  borough: 'Bronx',  
  cuisine: 'Bakery',  
  grades: [  
    {
```



```

    date: 2014-03-03T00:00:00.000Z,
    grade: 'A', score: 2
  },
  {
    date: 2013-09-11T00:00:00.000Z,
    grade: 'A', score: 6
  },
  {
    date: 2013-01-24T00:00:00.000Z,
    grade: 'A', score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B', score: 14
  }
],
name: 'Morris Park Bake Shop',
restaurant_id: '30075445'
}
{
  _id: ObjectId('671b5d549d3d63480e0a64e5'),
  address: { building: 1234, coord: [ 73.856577,
    40.848647
  ],
  street: '1st Avenue', zipcode: 10463
},
borough: 'Bronx', cuisine:
'Italian', grades: [
  {
    date: 2014-03-03T00:00:00.001Z,
    grade: 'A', score: 5
  },
  {
    date: 2013-09-11T00:00:00.001Z,
    grade: 'A', score:
    8 },
  {
    date: 2013-01-24T00:00:00.001Z,
    grade: 'B', score: 12
  },
  {
    date: 2011-11-23T00:00:00.001Z,
    grade: 'A', score: 7
  },
  {
    date: 2011-03-10T00:00:00.001Z,
    grade: 'A', score:
    15
  }
],

```

```
name: 'Pasta Palace', restaurant_id:
30075446
}
```

10. 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,
  _id: 0
}
);
```

SAMPLE OUTPUT:-

```
{
  grades: [
    {
      date: 2014-03-03T00:00:00.000Z,
      grade: 'A', score: 2
    },
    {
      date: 2013-09-11T00:00:00.000Z,
      grade: 'A', score: 6
    },
    {
      date: 2013-01-24T00:00:00.000Z,
      grade: 'A', score: 10
    },
    {
      date: 2011-11-23T00:00:00.000Z,
      grade: 'A', score: 9
    },
    {
      date: 2011-03-10T00:00:00.000Z,
      grade: 'B', score: 14
    }
  ],
  name: 'Morris Park Bake Shop',
  restaurant_id: '30075445'
}

{
  grades: [
    {
```

```

    date: 2014-03-03T00:00:00.001Z,
    grade: 'A', score: 5
  },
  {
    date: 2013-09-11T00:00:00.001Z,
    grade: 'A', score: 8
  },
  {
    date: 2013-01-24T00:00:00.001Z,
    grade: 'B', score: 12
  },
  {
    date: 2011-11-23T00:00:00.001Z,
    grade: 'A', score:
    7 },
  {
    date: 2011-03-10T00:00:00.001Z,
    grade: 'A', score: 15
  }
],
name:      'Pasta Palace', restaurant_id: 30075446
}

```

11. 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/i }
},
{
  name: 1, borough:
  1,
  "address.coord.0": 1, // Longitude
  "address.coord.1": 1, // Latitude cuisine:
  1,
  _id: 0
}
);

```

12. Write a MongoDB query to find the restaurant name, borough, longitude and latitude 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.0": 1, // Longitude
  "address.coord.1": 1, // Latitude cuisine:
  1,
  _id: 0
}
);

```

13. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5.

```

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

```

SAMPLE OUTPUT:-

```

{
  _id: ObjectId('671b92d339ec8a9bc8b6588b'), address:
  {
    building: '1007', coord: [
      -73.856077,
      40.848447
    ],
    street: 'Morris Park Ave', zipcode:
    '10462'
  },
  borough:      'Bronx',
  cuisine:      'Bakery',
  grades: [
    {
      date: 2014-03-03T00:00:00.000Z,
      grade: 'A', score: 2
    },
    {
      date: 2013-09-11T00:00:00.000Z,
      grade: 'A', score: 6
    },
    {

```

```

    date: 2013-01-24T00:00:00.000Z,
    grade: 'A', score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B', score: 14
  }
],
name: 'Morris Park Bake Shop',
restaurant_id: '30075445'
}
{
  _id: ObjectId('671b5d549d3d63480e0a64e6'), address: {
    building: 5678, coord: [
      -
      73.856977,
      40.848847
    ],
    street: '2nd Avenue', zipcode:
    10464
  },
  borough: 'Manhattan', cuisine:
  'Chinese', grades: [
    {
      date: 2014-03-03T00:00:00.002Z, grade:
      'B', score: 4
    },
    {
      date: 2013-09-11T00:00:00.002Z, grade:
      'A', score: 9
    },
    {
      date: 2013-01-24T00:00:00.002Z, grade: 'A',
      score: 10
    },
    {
      date: 2011-11-23T00:00:00.002Z, grade: 'A',
      score: 8
    },
    {
      date: 2011-03-10T00:00:00.002Z, grade: 'B',
      score: 16
    }
  ],
  name: 'Dragon Wok', restaurant_id:
  30075447
}

```

14. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan.

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

```
_id: ObjectId('671b5d549d3d63480e0a64e6'),
address: {
  building: 5678,
  coord: [
    -73.856977,
    40.848847
  ],
  street: '2nd Avenue',
  zipcode: 10464
},
borough: 'Manhattan',
cuisine: 'Chinese',
grades: [
  {
    date: 2014-03-03T00:00:00.002Z,
    grade: 'B',
    score: 4
  },
  {
    date: 2013-09-11T00:00:00.002Z,
    grade: 'A',
    score: 9
  },
  {
    date: 2013-01-24T00:00:00.002Z,
    grade: 'A',
    score: 10
  },
  {
```

15. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn.

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

```

    _id: ObjectId('671b5d549d3d63480e0a64e6'),
    address: {
      building: 5678,
      coord: [
        -73.856977,
        40.848847
      ],
      street: '2nd Avenue',
      zipcode: 10464
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
      {
        date: 2014-03-03T00:00:00.002Z,
        grade: 'B',
        score: 4
      },
      {
        date: 2013-09-11T00:00:00.002Z,
        grade: 'A',
        score: 9
      },
      {
        date: 2013-01-24T00:00:00.002Z,
        grade: 'A',
        score: 10
      }
    ]
  },

```

16. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn, and their cuisine is not American.

```

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

```

```

    _id: ObjectId('671b5d549d3d63480e0a64e6'),
    address: {
      building: 5678,
      coord: [
        -73.856977,
        40.848847
      ],
      street: '2nd Avenue',
      zipcode: 10464
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
      {
        date: 2014-03-03T00:00:00.002Z,
        grade: 'B',
        score: 4
      },
      {
        date: 2013-09-11T00:00:00.002Z,
        grade: 'A',
        score: 9
      },
      {
        date: 2013-01-24T00:00:00.002Z,
        grade: 'A',
        score: 10
      },
      {

```

17. Write a MongoDB query to find the restaurants that have at least one grade with a score of less than 5 and that are located in the borough of Manhattan or Brooklyn, and their cuisine is not American or Chinese.

```

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

```

18. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6.

```

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

```

SAMPLE OUTPUT:-

```

{

```



```
_id: ObjectId('671b92d339ec8a9bc8b6588b'),
address: { building: '1007', coord: [ 73.856077,
  40.848447
],
  street: 'Morris Park Ave', zipcode:
  '10462'
},
borough: 'Bronx', cuisine:
'Bakery', grades: [
  {
    date: 2014-03-03T00:00:00.000Z,
    grade: 'A', score: 2
  },
  {
    date: 2013-09-11T00:00:00.000Z,
    grade: 'A', score: 6
  },
  {
    date: 2013-01-24T00:00:00.000Z,
    grade: 'A', score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B', score: 14
  }
],
name: 'Morris Park Bake Shop',
restaurant_id: '30075445'
}
{
  _id: ObjectId('671b5c5f9d3d63480e0a64e4'), address: {
    building: 1007, coord: [ -
    73.856077,
    40.848447
    ],
    street: 'Morris Park Ave', zipcode:
    10462
  },
  borough:      'Bronx',
  cuisine:      'Bakery',
  grades: [
    {
      date: 2014-03-03T00:00:00.000Z,
      grade: 'A', score: 2
    },
    {
      date: 2013-09-11T00:00:00.000Z,
      grade: 'A', score: 6
    },
    {
```

```

    date: 2013-01-24T00:00:00.000Z,
    grade: 'A', score: 10
  },
  {
    date: 2011-11-23T00:00:00.000Z,
    grade: 'A', score: 9
  },
  {
    date: 2011-03-10T00:00:00.000Z,
    grade: 'B', score: 14
  }
],
name: 'Morris Park Bake Shop',
restaurant_id: 30075445
}

```

19. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan. `db.restaurants.find(`

```

{
  borough: "Manhattan", grades: {
    $all: [
      { $elemMatch: { score: 2 } },
      { $elemMatch: { score: 6 } }
    ]
  }
}
);

```

20. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn.

```

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

```

```
}  
);
```

21. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn, and their cuisine is not American.

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

22. Write a MongoDB query to find the restaurants that have a grade with a score of 2 and a grade with a score of 6 and are located in the borough of Manhattan or Brooklyn, and their cuisine is not American or Chinese.

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

23. Write a MongoDB query to find the restaurants that have a grade with a score of 2 or a grade with a score of 6.

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

SAMPLE OUTPUT:-

```
{
  _id: ObjectId('671b5d549d3d63480e0a64e9'), address: {
    building: 2233, coord: [ -
      73.858177,
      40.849447
    ],
    street: '5th Avenue', zipcode:
      10467
  },
  borough: 'Bronx', cuisine:
    'American', grades: [
    {
      date: 2014-03-03T00:00:00.005Z,
      grade: 'A', score: 10
    },
    {
      date: 2013-09-11T00:00:00.005Z,
      grade: 'A', score: 6
    },
    {
      date: 2013-01-24T00:00:00.005Z,
      grade: 'B', score: 12
    },
    {
      date: 2011-11-23T00:00:00.005Z,
      grade: 'A', score: 9
    },
    {
      date: 2011-03-10T00:00:00.005Z,
      grade: 'A', score: 14
    }
  ],
  name: 'Burger Bistro', restaurant_id:
    30075450
}
{
  _id: ObjectId('671b5dab56ec9972ca8f5daf'), address: {
    building: 4455, coord: [ 73.858977,
      40.849847
    ],
    street: '7th Avenue', zipcode:
      10469
  },
  borough: 'Bronx', cuisine:
    'Thai', grades: [ {
      date: 2014-03-03T00:00:00.007Z,
      grade: 'A', score: 9
    },
  ],
}
```

```

{
  date: 2013-09-11T00:00:00.007Z,
  grade: 'B', score: 6
},
{
  date: 2013-01-24T00:00:00.007Z,
  grade: 'A', score: 12
},
{
  date: 2011-11-23T00:00:00.007Z, grade:
  'A', score: 8
},
{
  date: 2011-03-10T00:00:00.007Z, grade:
  'B', score: 14
}
],
name: 'Thai Delight', restaurant_id:
30075452
}

```

MOVIES COLLECTION

1. Find all movies with full information from the 'movies' collection that released in the year 1893.

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

2. Find all movies with full information from the 'movies' collection that have a runtime greater than 120 minutes. `db.movies.find({ runtime: { $gt: 120 } });`

SAMPLE OUTPUT:-

```

{
  _id: ObjectId('573a1390f29313caabcd42ec'), plot: 'An astronaut
stranded on Mars must survive alone.',
  genres: [
    'Sci-Fi',
    'Drama'
  ],
  runtime: 135, cast:
  [
    'Matt Damon',
    'Jessica Chastain'
  ],
}

```

```

poster: 'https://m.media-amazon.com/images/poster4.jpg',    title: 'Mars
Alone', fullplot: 'An astronaut, left alone on Mars, struggles to survive with
limited resources while awaiting rescue.',
languages: [ 'English'
],
released: 2015-10-02T00:00:00.000Z, directors: [
'Ridley Scott'
],
rated: 'PG-13',
awards: { wins: 8,
nominations: 6, text: '8 wins
& 6 nominations.'
},
lastupdated: '2021-08-09
17:22:30.000000000', year: 2015, imdb: { rating: 8,
votes: 25650,
id: 443
},
countries: [ 'USA'
],
type: 'movie',
tomatoes: { viewer: {
rating: 4.5,
numReviews: 2201, meter: 93
},
fresh: 18, critic: {
rating: 8.5,
numReviews: 25, meter: 96
},
rotten: 1, lastUpdated: 2021-07-
19T21:20:55.000Z
}
}

```

3. Find all movies with full information from the 'movies' collection that have "Short" genre.

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

SAMPLE OUTPUT:-

```
{
```

_id: ObjectId('573a1390f29313caabcd42e8'), plot: 'A group of bandits stage a brazen train hold-up, only to find a determined posse hot on their heels.', genres: ['Short', 'Western'], runtime: 11, cast: ['A.C. Abadie', "Gilbert M. 'Broncho Billy' Anderson", 'George Barnes', 'Justus D. Barnes'], poster: 'https://m.media-amazon.com/images/M/MV5BMTU3NjE5NzYtYTYyNS00MDVmLWlwYjgtMmYwYWlxZDYyNzU2XkEyXkFqcGdeQXVyNzQzNzQxNzI@._V1_SY1000_SX677_AL_.jpg', title: 'The Great Train Robbery', fullplot: "Among the earliest existing films in American cinema - notable as the first film that presented a narrative story to tell - it depicts a group of cowboy outlaws who hold up a train and rob the passengers. They are then pursued by a Sheriff's posse. Several scenes have color included - all hand tinted.", languages: ['English'], released: 1903-12-01T00:00:00.000Z, directors: ['Edwin S. Porter'], rated: 'TV-G', awards: { wins: 1, nominations: 0, text: '1 win.' }, lastupdated: '2015-08-13 00:27:59.177000000', year: 1903, imdb: { rating: 7.4, votes: 9847, id: 439 }, countries: ['USA'],

- ```
db.movies.find({ directors: "William" })
```

**6. Retrieve all movies from the '1990s' decade, located in the USA and include complete info**

**Retrieve all movies from the 'UNRATED' category and are rated as "UNRATED"**



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

8. Retrieve all movies from the 'movies' collection that have complete information and have received more than 1000 votes on IMDb.

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

```
< {
 _id: ObjectId('573a1390f29313caabcd42e8'),
 plot: 'A group of bandits stage a brazen train hold-up, only to find a determined posse hot on their heels.',
 genres: [
 'Short',
 'Western'
],
 runtime: 11,
 cast: [
 'A.C. Abadie',
 'Gilbert M. 'Broncho Billy' Anderson',
 'George Barnes',
 'Justus D. Barnes'
],
 poster: 'https://m.media-amazon.com/images/M/MV5BMTU3NjE5NzYtYTYyNS00MDVmLWIwYjgtMmYwYWIxZDYyNzU2XkEyXkFqcGdeQXVyNzQzNzQxNzI@._V1_SY1000
 title: 'The Great Train Robbery',
 fullplot: 'Among the earliest existing films in American cinema - notable as the first film that presented a narrative story to tell - i
 languages: [
 'English'
],
 released: 1903-12-01T00:00:00.000Z,
 directors: [
 'Edwin S. Porter'
],
}
```

9. Retrieve all movies from the 'movies' collection that have complete information and have an IMDb rating higher than 7.

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

```
> db.movies.find({ "imdb.rating": { $gt: 7 } });
< {
 _id: ObjectId('573a1390f29313caabcd42e8'),
 plot: 'A group of bandits stage a brazen train hold-up, only to find a determined posse hot on their heels.',
 genres: [
 'Short',
 'Western'
],
 runtime: 11,
 cast: [
 'A.C. Abadie',
 'Gilbert M. 'Broncho Billy' Anderson',
 'George Barnes',
 'Justus D. Barnes'
],
 poster: 'https://m.media-amazon.com/images/M/MV5BMTU3NjE5NzYtYTUyNS00MDVmLWIwYjgtMmYwYWIxZDZkYzU2XkE5XkFqcGdeQXVyNzQzNzQxNzI@._V1_SY1000
 title: 'The Great Train Robbery',
 fullplot: 'Among the earliest existing films in American cinema - notable as the first film that presented a narrative story to tell - i
 languages: [
 'English'
],
 released: 1903-12-01T00:00:00.000Z,
 directors: [
 'Edwin S. Porter'
],
 rated: 'TV-G',
 awards: {
 wins: 1,
```

**10. Retrieve all movies from the 'movies' collection that have complete information and have a viewer rating higher than 4 on Tomatoes.**

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

```
> db.movies.find({ "tomatoes.viewer.rating": { $gt: 4 } });
< {
 _id: ObjectId('573a1390f29313caabcd42ea'),
 plot: 'A chef tries to open a restaurant amidst a series of challenges.',
 genres: [
 'Drama',
 'Comedy'
],
 runtime: 120,
 cast: [
 'Emma Stone',
 'Chris Pratt',
 'Anna Kendrick'
],
 poster: 'https://m.media-amazon.com/images/poster2.jpg',
 title: 'The Culinary Dream',
 fullplot: 'A chef's journey to make his dream restaurant come true, overcoming family and financial obstacles.',
 languages: [
 'English',
 'French'
],
 released: 2015-02-12T00:00:00.000Z,
 directors: [
 'Samantha Jones'
],
 rated: 'PG-13',
 awards: {
 wins: 1,
```

**11. Retrieve all movies from the 'movies' collection that have received an award.**

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

```

> db.movies.find({ "awards.wins": { $gt: 0 } });
< {
 _id: ObjectId('573a1390f29313caabcd42e8'),
 plot: 'A group of bandits stage a brazen train hold-up, only to find a determined posse hot on their heels.',
 genres: [
 'Short',
 'Western'
],
 runtime: 11,
 cast: [
 'A.C. Abadie',
 'Gilbert M. 'Broncho Billy' Anderson',
 'George Barnes',
 'Justus D. Barnes'
],
 poster: 'https://m.media-amazon.com/images/M/MV5BMTU3NjE5NzYtYTYyNS00MDVmLWIwYjgtMmYwYWIxZDYyNzU2XkEyXkFqcGdeQXVyNzQzNzQxNzI@._V1_SV1000',
 title: 'The Great Train Robbery',
 fullplot: "Among the earliest existing films in American cinema - notable as the first film that presented a narrative story to tell - i
 languages: [
 'English'
],
 released: 1903-12-01T00:00:00.000Z,
 directors: [
 'Edwin S. Porter'
],
 rated: 'TV-G',
 awards: {
 wins: 1,

```

**12. Find all movies with title, languages, released, directors, writers, awards, year, genres, runtime, cast, countries from the 'movies' collection in MongoDB that have at least one nomination.**

```

db.movies.find(
 { "awards.nominations": { $gt: 0 } },
 { title: 1,
 languages: 1,
 released: 1,
 directors: 1, writers:
 1, awards: 1, year: 1,
 genres: 1, runtime:
 1, cast: 1, countries:
 1
 }
);

```

```
>_MONGOSH
,,
< {
 _id: ObjectId('573a1390f29313caabcd42e9'),
 genres: [
 'Adventure',
 'Fantasy'
],
 runtime: 95,
 cast: [
 'Ethan Hawke',
 'Jane Doe',
 'Mark Strong'
],
 title: 'The Amulet Quest',
 languages: [
 'English'
],
 released: 2008-07-15T00:00:00.000Z,
 directors: [
 'John Smith'
],
 awards: {
 wins: 2,
 nominations: 1,
 text: '2 wins & 1 nomination.'
 },
 year: 2008,
 countries: [
 'USA'
]
}
```

13. Find all movies with title, languages, released, directors, writers, awards, year, genres, runtime, cast, countries from the 'movies' collection in MongoDB with cast including "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. Retrieve all movies with title, languages, released, directors, writers, countries from the 'movies' collection in MongoDB that 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
 }
);
```

**14. Retrieve all movies with title, languages, released, directors, writers, countries from the 'movies' collection in MongoDB that have a word "scene" in the title.**

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