

Part A

- 1.** Show the first 5 restaurants which is in the borough Bronx.
 - o db.restaurants.find({ "borough": "Bronx" }).limit(5)

```
Restaurant> db.restaurants.find({ "borough": "Bronx" }).limit(5)
[
  {
    _id: ObjectId('663a2760414535b89dc78ee6'),
    address: {
      building: '1007',
      coord: [ -73.856077, 40.848447 ],
      street: 'Morris Park Ave',
      zipcode: '10462'
    },
    borough: 'Bronx',
    cuisine: 'Bakery',
    grades: [
      {
        date: ISODate('2014-03-03T00:00:00.000Z'),
        grade: 'A',
        score: 2
      },
      {
        date: ISODate('2013-09-11T00:00:00.000Z'),
        grade: 'A',
        score: 6
      },
      {
        date: ISODate('2013-01-24T00:00:00.000Z'),
        grade: 'A',
        score: 10
      },
      {
        date: ISODate('2011-11-23T00:00:00.000Z'),
        grade: 'A',
        score: 9
      },
      {
        date: ISODate('2011-03-10T00:00:00.000Z'),
        grade: 'B',
        score: 14
      }
    ],
    name: 'Morris Park Bake Shop',
    restaurant_id: '30075445'
  },
  {
    _id: ObjectId('663a2760414535b89dc78ef0'),
    address: {
      building: '2300',
      coord: [ -73.8786113, 40.8502883 ],
      street: 'Southern Boulevard',
      zipcode: '10460'
    },
    borough: 'Bronx',
    cuisine: 'American',
    grades: [
      {
        date: ISODate('2014-05-28T00:00:00.000Z'),
        grade: 'A',
        score: 11
      },
      {
        date: ISODate('2013-06-19T00:00:00.000Z'),
        grade: 'A',
        score: 4
      }
    ]
  }
]
```

```
{
  date: ISODate('2012-06-15T00:00:00.000Z'),
  grade: 'A',
  score: 3
},
{
  name: 'Wild Asia',
  restaurant_id: '40357217'
},
{
  _id: ObjectId('663a2760414535b89dc78f05'),
  address: {
    building: '1006',
    coord: [ -73.84856870000002, 40.8903781 ],
    street: 'East 233 Street',
    zipcode: '10466'
  },
  borough: 'Bronx',
  cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
  grades: [
    {
      date: ISODate('2014-04-24T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-09-05T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-02-21T00:00:00.000Z'),
      grade: 'A',
      score: 9
    },
    {
      date: ISODate('2012-07-03T00:00:00.000Z'),
      grade: 'A',
      score: 11
    },
    {
      date: ISODate('2011-07-11T00:00:00.000Z'),
      grade: 'A',
      score: 5
    }
  ],
  name: 'Carvel Ice Cream',
  restaurant_id: '40363093'
},
{
  _id: ObjectId('663a2760414535b89dc78f09'),
  address: {
    building: '1236',
    coord: [ -73.8893654, 40.81376179999999 ],
    street: '238 Spofford Ave',
    zipcode: '10474'
  },
  borough: 'Bronx',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2013-12-30T00:00:00.000Z'),
      grade: 'A',
      score: 10
    }
  ]
}
```

```

cuisine: 'Chinese',
grades: [
  {
    date: ISODate('2013-12-30T00:00:00.000Z'),
    grade: 'A',
    score: 8
  },
  {
    date: ISODate('2013-01-08T00:00:00.000Z'),
    grade: 'A',
    score: 10
  },
  {
    date: ISODate('2012-06-12T00:00:00.000Z'),
    grade: 'B',
    score: 15
  }
],
name: 'Happy Garden',
restaurant_id: '40363289'
},
{
  _id: ObjectId('663a2760414535b89dc78f1b'),
  address: {
    building: '277',
    coord: [ -73.8941893, 40.8634684 ],
    street: 'East Kingsbridge Road',
    zipcode: '10458'
  },
  borough: 'Bronx',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-03-03T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-09-26T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-03-19T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2012-08-29T00:00:00.000Z'),
      grade: 'A',
      score: 11
    },
    {
      date: ISODate('2011-08-17T00:00:00.000Z'),
      grade: 'A',
      score: 13
    }
  ],
  name: 'Happy Garden',
  restaurant_id: '40364296'
}
]
Restaurant> █

```

○

2. Show the restaurants which do not serve any cuisine of 'Chinese' and received a grade point 'B'. The results should be sorted based on cuisine in descending order.

- db.restaurants.find({
○ "cuisine": { "\$ne": "Chinese" }, "grades.grade": "B"}).sort({ "cuisine": -1
}).limit(5)

```
[  
  {  
    _id: ObjectId('663a2760414535b89dc79a94'),  
    address: {  
      building: '148',  
      coord: [ -74.000254, 40.7172727 ],  
      street: 'Centre Street',  
      zipcode: '10013'  
    },  
    borough: 'Manhattan',  
    cuisine: 'Vietnamese/Cambodian/Malaysia',  
    grades: [  
      {  
        date: ISODate('2014-10-01T00:00:00.000Z'),  
        grade: 'A',  
        score: 7  
      },  
      {  
        date: ISODate('2014-05-19T00:00:00.000Z'),  
        grade: 'C',  
        score: 5  
      },  
      {  
        date: ISODate('2013-11-15T00:00:00.000Z'),  
        grade: 'B',  
        score: 14  
      },  
      {  
        date: ISODate('2013-03-08T00:00:00.000Z'),  
        grade: 'B',  
        score: 25  
      },  
      {  
        date: ISODate('2012-05-22T00:00:00.000Z'),  
        grade: 'B',  
        score: 23  
      },  
      {  
        date: ISODate('2011-10-27T00:00:00.000Z'),  
        grade: 'A',  
        score: 9  
      }  
    ],  
    name: 'Nha-Trang Centre Vietnam Restaurant',  
    restaurant_id: '40751226'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc79927'),  
    address: {  
      building: '157',  
      coord: [ -73.996577, 40.719515 ],  
      street: 'Mott Street',  
      zipcode: '10013'  
    },  
    borough: 'Manhattan',  
    cuisine: 'Vietnamese/Cambodian/Malaysia',  
    grades: [  
      {  
        date: ISODate('2014-09-29T00:00:00.000Z'),  
        grade: 'B',  
        score: 26  
      },  
      {  
        date: ISODate('2014-09-29T00:00:00.000Z'),  
        grade: 'B',  
        score: 26  
      }  
    ]  
  }  
]
```

```
},
{
  date: ISODate('2014-05-14T00:00:00.000Z'),
  grade: 'C',
  score: 47
},
{
  date: ISODate('2013-09-30T00:00:00.000Z'),
  grade: 'B',
  score: 17
},
{
  date: ISODate('2013-04-16T00:00:00.000Z'),
  grade: 'C',
  score: 41
},
{
  date: ISODate('2012-12-24T00:00:00.000Z'),
  grade: 'C',
  score: 9
},
{
  date: ISODate('2012-04-16T00:00:00.000Z'),
  grade: 'B',
  score: 27
},
],
name: 'Pho Bang Restaurant',
restaurant_id: '40700664'
},
{
  _id: ObjectId('663a2760414535b89dc796ab'),
  address: {
    building: '8278',
    coord: [ -73.88143509999999, 40.7412552 ],
    street: 'Broadway',
    zipcode: '11373'
  },
  borough: 'Queens',
  cuisine: 'Vietnamese/Cambodian/Malaysia',
  grades: [
    {
      date: ISODate('2014-06-12T00:00:00.000Z'),
      grade: 'B',
      score: 21
    },
    {
      date: ISODate('2013-05-20T00:00:00.000Z'),
      grade: 'A',
      score: 13
    },
    {
      date: ISODate('2012-12-26T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2012-12-03T00:00:00.000Z'),
      grade: 'P',
      score: 5
    },
    {
      date: ISODate('2012-05-04T00:00:00.000Z'),
      grade: 'P',
      score: 5
    }
  ]
}
```

```
        },
        {
            date: ISODate('2012-05-04T00:00:00.000Z'),
            grade: 'B',
            score: 27
        }
    ],
    name: 'Pho Bac Vietnamese Seafood Cuisine',
    restaurant_id: '40578058'
},
{
    _id: ObjectId('663a2760414535b89dc79196'),
    address: {
        building: '300',
        coord: [ -73.985568, 40.7307496 ],
        street: 'East 12 Street',
        zipcode: '10003'
    },
    borough: 'Manhattan',
    cuisine: 'Vegetarian',
    grades: [
        {
            date: ISODate('2014-02-05T00:00:00.000Z'),
            grade: 'A',
            score: 13
        },
        {
            date: ISODate('2013-04-24T00:00:00.000Z'),
            grade: 'B',
            score: 19
        },
        {
            date: ISODate('2012-01-17T00:00:00.000Z'),
            grade: 'A',
            score: 12
        },
        {
            date: ISODate('2011-07-25T00:00:00.000Z'),
            grade: 'A',
            score: 10
        }
    ],
    name: 'Angelica Kitchen',
    restaurant_id: '40388281'
},
{
    _id: ObjectId('663a2760414535b89dc797f4'),
    address: {
        building: '405',
        coord: [ -73.9856523999999, 40.7263767 ],
        street: 'East 6 Street',
        zipcode: '10009'
    },
    borough: 'Manhattan',
    cuisine: 'Vegetarian',
    grades: [
        {
            date: ISODate('2014-09-29T00:00:00.000Z'),
            grade: 'A',
            score: 9
        },
        {
            date: ISODate('2014-01-27T00:00:00.000Z'),
            grade: 'B',
            score: 18
        }
    ]
}
```

```
        score: 19
    },
    {
        date: ISODate('2012-01-17T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2011-07-25T00:00:00.000Z'),
        grade: 'A',
        score: 10
    }
],
name: 'Angelica Kitchen',
restaurant_id: '40388281'
},
{
    _id: ObjectId('663a2760414535b89dc797f4'),
    address: {
        building: '405',
        coord: [ -73.9856523999999, 40.7263767 ],
        street: 'East 6 Street',
        zipcode: '10009'
    },
    borough: 'Manhattan',
    cuisine: 'Vegetarian',
    grades: [
        {
            date: ISODate('2014-09-29T00:00:00.000Z'),
            grade: 'A',
            score: 9
        },
        {
            date: ISODate('2014-01-27T00:00:00.000Z'),
            grade: 'B',
            score: 18
        },
        {
            date: ISODate('2013-07-31T00:00:00.000Z'),
            grade: 'A',
            score: 11
        },
        {
            date: ISODate('2013-02-26T00:00:00.000Z'),
            grade: 'B',
            score: 18
        },
        {
            date: ISODate('2012-08-06T00:00:00.000Z'),
            grade: 'A',
            score: 13
        },
        {
            date: ISODate('2012-01-19T00:00:00.000Z'),
            grade: 'B',
            score: 22
        }
    ],
    name: 'Caravan Of Dreams',
    restaurant_id: '40635781'
}
]
Restaurant> █
```

- 3.** Show the fields restaurant_id, name, cuisine and borough, but don't include _id for the first 5 restaurants.

- db.restaurants.find({}, { "restaurant_id": 1, "name": 1, "cuisine": 1, "borough": 1, "_id": 0 }).limit(5)

```
Restaurant> db.restaurants.find({}, { "restaurant_id": 1, "name": 1, "cuisine": 1, "borough": 1, "_id": 0 }).limit(5)
[ {
  "borough": "Bronx",
  "cuisine": "Bakery",
  "name": "Morris Park Bake Shop",
  "restaurant_id": "30075445"
},
{
  "borough": "Brooklyn",
  "cuisine": "Hamburgers",
  "name": "Wendy's",
  "restaurant_id": "30112340"
},
{
  "borough": "Manhattan",
  "cuisine": "Irish",
  "name": "Dj Reynolds Pub And Restaurant",
  "restaurant_id": "30191841"
},
{
  "borough": "Brooklyn",
  "cuisine": "American",
  "name": "Riviera Caterer",
  "restaurant_id": "40356018"
},
{
  "borough": "Queens",
  "cuisine": "Jewish/Kosher",
  "name": "Tov Kosher Kitchen",
  "restaurant_id": "40356068"
}]
```

- 4.** Show the next 5 restaurants after skipping first 5 which are in the borough Bronx.

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

```
[  
  {  
    _id: ObjectId('663a2760414535b89dc78f23'),  
    address: {  
      building: '658',  
      coord: [ -73.81363999999999, 40.82941100000001 ],  
      street: 'Clarence Ave',  
      zipcode: '10465'  
    },  
    borough: 'Bronx',  
    cuisine: 'American ',  
    grades: [  
      {  
        date: ISODate('2014-06-21T00:00:00.000Z'),  
        grade: 'A',  
        score: 5  
      },  
      {  
        date: ISODate('2012-07-11T00:00:00.000Z'),  
        grade: 'A',  
        score: 10  
      }  
    ],  
    name: 'Manhem Club',  
    restaurant_id: '40364363'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78f3b'),  
    address: {  
      building: '2222',  
      coord: [ -73.84971759999999, 40.8304811 ],  
      street: 'Haviland Avenue',  
      zipcode: '10462'  
    },  
    borough: 'Bronx',  
    cuisine: 'American ',  
    grades: [  
      {  
        date: ISODate('2014-12-18T00:00:00.000Z'),  
        grade: 'A',  
        score: 7  
      },  
      {  
        date: ISODate('2014-05-01T00:00:00.000Z'),  
        grade: 'B',  
        score: 17  
      },  
      {  
        date: ISODate('2013-03-14T00:00:00.000Z'),  
        grade: 'A',  
        score: 12  
      },  
      {  
        date: ISODate('2012-09-20T00:00:00.000Z'),  
        grade: 'A',  
        score: 9  
      },  
      {  
        date: ISODate('2012-02-08T00:00:00.000Z'),  
        grade: 'B',  
        score: 19  
      }  
    ],  
  }  
]
```

```
        ],
        name: 'The New Starling Athletic Club Of The Bronx',
        restaurant_id: '40364956'
    },
    {
        _id: ObjectId('663a2760414535b89dc78f53'),
        address: {
            building: '72',
            coord: [ -73.92506, 40.8275556 ],
            street: 'East 161 Street',
            zipcode: '10451'
        },
        borough: 'Bronx',
        cuisine: 'American',
        grades: [
            {
                date: ISODate('2014-04-15T00:00:00.000Z'),
                grade: 'A',
                score: 9
            },
            {
                date: ISODate('2013-11-14T00:00:00.000Z'),
                grade: 'A',
                score: 4
            },
            {
                date: ISODate('2013-07-29T00:00:00.000Z'),
                grade: 'A',
                score: 10
            },
            {
                date: ISODate('2012-12-31T00:00:00.000Z'),
                grade: 'B',
                score: 15
            },
            {
                date: ISODate('2012-05-30T00:00:00.000Z'),
                grade: 'A',
                score: 13
            },
            {
                date: ISODate('2012-01-09T00:00:00.000Z'),
                grade: 'A',
                score: 10
            },
            {
                date: ISODate('2011-08-15T00:00:00.000Z'),
                grade: 'C',
                score: 37
            }
        ],
        name: 'Yankee Tavern',
        restaurant_id: '40365499'
    },
    {
        _id: ObjectId('663a2760414535b89dc78f66'),
        address: {
            building: '331',
            coord: [ -73.8778653999999, 40.8724377 ],
            street: 'East 204 Street',
            zipcode: '10467'
        },
        borough: 'Bronx',
```

```
borough: 'Bronx',
cuisine: 'Irish',
grades: [
  {
    date: ISODate('2014-08-26T00:00:00.000Z'),
    grade: 'A',
    score: 10
  },
  {
    date: ISODate('2014-03-26T00:00:00.000Z'),
    grade: 'B',
    score: 23
  },
  {
    date: ISODate('2013-09-11T00:00:00.000Z'),
    grade: 'A',
    score: 13
  },
  {
    date: ISODate('2012-12-18T00:00:00.000Z'),
    grade: 'B',
    score: 27
  },
  {
    date: ISODate('2011-10-20T00:00:00.000Z'),
    grade: 'A',
    score: 13
  }
],
name: 'McDwyers Pub',
restaurant_id: '40365893'
},
{
  _id: ObjectId('663a2760414535b89dc78f7f'),
  address: {
    building: '5820',
    coord: [ -73.9002615, 40.885186 ],
    street: 'Broadway',
    zipcode: '10463'
  },
  borough: 'Bronx',
  cuisine: 'American',
  grades: [
    {
      date: ISODate('2014-02-26T00:00:00.000Z'),
      grade: 'A',
      score: 5
    },
    {
      date: ISODate('2013-10-09T00:00:00.000Z'),
      grade: 'B',
      score: 19
    },
    {
      date: ISODate('2013-05-15T00:00:00.000Z'),
      grade: 'A',
      score: 9
    },
    {
      date: ISODate('2012-11-20T00:00:00.000Z'),
      grade: 'B',
      score: 18
    },
  ]
}
```

```
        score: 13
    },
    {
        date: ISODate('2012-12-18T00:00:00.000Z'),
        grade: 'B',
        score: 27
    },
    {
        date: ISODate('2011-10-20T00:00:00.000Z'),
        grade: 'A',
        score: 13
    }
],
name: 'McDwyers Pub',
restaurant_id: '40365893'
},
{
    _id: ObjectId('663a2760414535b89dc78f7f'),
    address: {
        building: '5820',
        coord: [ -73.9002615, 40.885186 ],
        street: 'Broadway',
        zipcode: '10463'
    },
    borough: 'Bronx',
    cuisine: 'American',
    grades: [
        {
            date: ISODate('2014-02-26T00:00:00.000Z'),
            grade: 'A',
            score: 5
        },
        {
            date: ISODate('2013-10-09T00:00:00.000Z'),
            grade: 'B',
            score: 19
        },
        {
            date: ISODate('2013-05-15T00:00:00.000Z'),
            grade: 'A',
            score: 9
        },
        {
            date: ISODate('2012-11-20T00:00:00.000Z'),
            grade: 'B',
            score: 18
        },
        {
            date: ISODate('2011-10-17T00:00:00.000Z'),
            grade: 'A',
            score: 10
        },
        {
            date: ISODate('2011-06-22T00:00:00.000Z'),
            grade: 'C',
            score: 35
        }
    ],
    name: 'The Punch Bowl',
    restaurant_id: '40366497'
}
]
Restaurant> █
```

5. Show the restaurants located in the borough Manhattan and prepared either American or Chinese dish.
 - o db.restaurants.find({"borough": "Manhattan", "cuisine": { "\$in": ["American", "Chinese"] }})

```
[  
  {  
    _id: ObjectId('663a2760414535b89dc78f69'),  
    address: {  
      building: '21',  
      coord: [ -73.9990337, 40.7143954 ],  
      street: 'Mott Street',  
      zipcode: '10013'  
    },  
    borough: 'Manhattan',  
    cuisine: 'Chinese',  
    grades: [  
      {  
        date: ISODate('2014-07-28T00:00:00.000Z'),  
        grade: 'B',  
        score: 27  
      },  
      {  
        date: ISODate('2013-11-19T00:00:00.000Z'),  
        grade: 'B',  
        score: 20  
      },  
      {  
        date: ISODate('2013-04-30T00:00:00.000Z'),  
        grade: 'A',  
        score: 11  
      },  
      {  
        date: ISODate('2012-10-16T00:00:00.000Z'),  
        grade: 'B',  
        score: 24  
      },  
      {  
        date: ISODate('2012-05-07T00:00:00.000Z'),  
        grade: 'A',  
        score: 12  
      }  
    ],  
    name: 'Hop Kee Restaurant',  
    restaurant_id: '40365942'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78f88'),  
    address: {  
      building: '155',  
      coord: [ -73.9690789, 40.7594184 ],  
      street: 'East 55 Street',  
      zipcode: '10022'  
    },  
    borough: 'Manhattan',  
    cuisine: 'Chinese',  
    grades: [  
      {  
        date: ISODate('2014-05-05T00:00:00.000Z'),  
        grade: 'A',  
        score: 11  
      },  
      {  
        date: ISODate('2013-04-25T00:00:00.000Z'),  
        grade: 'A',  
        score: 7  
      },  
      {  
        date:  
        grade:  
        score:  
      }  
    ]  
  }  
]
```

```
{
  date: ISODate('2011-09-13T00:00:00.000Z'),
  grade: 'A',
  score: 9
}
],
name: 'Shun Lee Palace Restaurant',
restaurant_id: '40366716'
},
{
  _id: ObjectId('663a2760414535b89dc79060'),
  address: {
    building: '37',
    coord: [ -73.9812519, 40.7728753 ],
    street: 'West 65 Street',
    zipcode: '10023'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-09-24T00:00:00.000Z'),
      grade: 'A',
      score: 13
    },
    {
      date: ISODate('2013-10-03T00:00:00.000Z'),
      grade: 'A',
      score: 13
    },
    {
      date: ISODate('2013-04-12T00:00:00.000Z'),
      grade: 'A',
      score: 11
    },
    {
      date: ISODate('2012-10-04T00:00:00.000Z'),
      grade: 'A',
      score: 7
    },
    {
      date: ISODate('2012-04-23T00:00:00.000Z'),
      grade: 'A',
      score: 13
    }
  ],
  name: 'Shun Lee',
  restaurant_id: '40366716'
}
```

```
        score: 9
    },
    {
        date: ISODate('2013-04-17T00:00:00.000Z'),
        grade: 'A',
        score: 11
    },
    {
        date: ISODate('2012-10-16T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2012-04-10T00:00:00.000Z'),
        grade: 'A',
        score: 13
    },
    {
        date: ISODate('2011-11-16T00:00:00.000Z'),
        grade: 'A',
        score: 10
    }
],
name: "Charlie'S Mom Chinese Restaurant",
restaurant_id: '40376121'
},
{
    _id: ObjectId('663a2760414535b89dc790fd'),
    address: {
        building: '877',
        coord: [ -73.9886619999999, 40.769442 ],
        street: '10 Avenue',
        zipcode: '10019'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-10-23T00:00:00.000Z'),
            grade: 'B',
            score: 23
        },
        {
            date: ISODate('2014-04-22T00:00:00.000Z'),
            grade: 'A',
            score: 11
        },
        {
            date: ISODate('2013-09-09T00:00:00.000Z'),
            grade: 'A',
            score: 10
        },
        {
            date: ISODate('2013-01-15T00:00:00.000Z')
        }
    ]
}
```

```
        name: 'Ocean Dragon Restaurant',
        restaurant_id: '40382877'
    },
    {
        _id: ObjectId('663a2760414535b89dc79152'),
        address: {
            building: '104',
            coord: [ -73.9997631999999, 40.7162194 ],
            street: 'Bayard Street',
            zipcode: '10013'
        },
        borough: 'Manhattan',
        cuisine: 'Chinese',
        grades: [
            {
                date: ISODate('2014-06-17T00:00:00.000Z'),
                grade: 'B',
                score: 16
            },
            {
                date: ISODate('2013-10-16T00:00:00.000Z'),
                grade: 'B',
                score: 21
            },
            {
                date: ISODate('2013-04-09T00:00:00.000Z'),
                grade: 'B',
                score: 17
            },
            {
                date: ISODate('2012-07-13T00:00:00.000Z'),
                grade: 'B',
                score: 23
            }
        ],
        name: "Winnie'S Bar",
        restaurant_id: '40386287'
    },
    {
        _id: ObjectId('663a2760414535b89dc7918d'),
        address: {
            building: '1290',
            coord: [ -73.9788903, 40.7605367 ],
            street: 'Avenue Of Americas',
            zipcode: '10119'
        },
        borough: 'Manhattan',
        cuisine: 'Chinese',
        grades: [
            {
                date: ISODate('2014-09-23T00:00:00.000Z'),
                grade: 'A',
                score: 10
            },
            {
                date: ISODate('2013-12-11T00:00:00.000Z'),
                grade: 'A',
                score: 12
            },
            {
                date: ISODate('2013-04-09T00:00:00.000Z'),
                grade: 'B',
                score: 26
            }
        ]
    }
]
```

```
},
{
    date: ISODate('2012-10-04T00:00:00.000Z'),
    grade: 'B',
    score: 23
},
{
    date: ISODate('2012-05-07T00:00:00.000Z'),
    grade: 'A',
    score: 13
},
{
    date: ISODate('2011-12-20T00:00:00.000Z'),
    grade: 'B',
    score: 22
}
],
name: "Yip'S",
restaurant_id: '40388209'
},
{
_id: ObjectId('663a2760414535b89dc79278'),
address: {
    building: '4041',
    coord: [ -73.9394856, 40.8426994 ],
    street: 'Broadway',
    zipcode: '10032'
},
borough: 'Manhattan',
cuisine: 'Chinese',
grades: [
{
    date: ISODate('2015-01-02T00:00:00.000Z'),
    grade: 'Z',
    score: 21
},
{
    date: ISODate('2014-04-17T00:00:00.000Z'),
    grade: 'A',
    score: 5
},
{
    date: ISODate('2013-10-17T00:00:00.000Z'),
    grade: 'A',
    score: 7
},
{
    date: ISODate('2013-03-21T00:00:00.000Z'),
    grade: 'A',
    score: 13
},
{
    date: ISODate('2012-07-16T00:00:00.000Z'),
    grade: 'A',
    score: 12
}
],
name: 'Empire Szechuan Noodle House'
```

```
building: '20',
coord: [ -73.99703339999999, 40.7160416 ],
street: 'Elizabeth Street',
zipcode: '10013'
},
borough: 'Manhattan',
cuisine: 'Chinese',
grades: [
{
date: ISODate('2014-11-07T00:00:00.000Z'),
grade: 'A',
score: 13
},
{
date: ISODate('2014-05-09T00:00:00.000Z'),
grade: 'A',
score: 7
},
{
date: ISODate('2013-03-13T00:00:00.000Z'),
grade: 'A',
score: 11
},
{
date: ISODate('2012-09-18T00:00:00.000Z'),
grade: 'A',
score: 12
},
{
date: ISODate('2012-04-25T00:00:00.000Z'),
grade: 'A',
score: 12
}
],
name: 'Jing Fong Restaurant',
restaurant_id: '40395023'
},
{
_id: ObjectId('663a2760414535b89dc792f9'),
address: {
building: '127',
coord: [ -73.999163, 40.725592 ],
street: 'Greene Street',
zipcode: '10012'
},
borough: 'Manhattan',
cuisine: 'Chinese',
grades: [
{
date: ISODate('2014-06-23T00:00:00.000Z'),
grade: 'A',
score: 10
},
{
date: ISODate('2013-12-18T00:00:00.000Z'),
grade: 'A',
score: 12
},
{
date: ISODate('2013-05-13T00:00:00.000Z'),
grade: 'A',
score: 12
}
]
```

```
{
  date: ISODate('2012-10-02T00:00:00.000Z'),
  grade: 'A',
  score: 13
},
{
  date: ISODate('2012-04-06T00:00:00.000Z'),
  grade: 'A',
  score: 11
},
{
  date: ISODate('2011-11-21T00:00:00.000Z'),
  grade: 'A',
  score: 6
},
{
  date: ISODate('2011-07-05T00:00:00.000Z'),
  grade: 'A',
  score: 7
}
],
name: 'Kelley & Ping',
restaurant_id: '40397159'
},
{
  _id: ObjectId('663a2760414535b89dc7932d'),
  address: {
    building: '242',
    coord: [ -73.973939, 40.748619 ],
    street: 'East 40 Street',
    zipcode: '10016'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-11-14T00:00:00.000Z'),
      grade: 'Z',
      score: 25
    },
    {
      date: ISODate('2013-12-12T00:00:00.000Z'),
      grade: 'B',
      score: 18
    },
    {
      date: ISODate('2013-05-07T00:00:00.000Z'),
      grade: 'B',
      score: 14
    },
    {
      date: ISODate('2012-09-17T00:00:00.000Z'),
      grade: 'A',
      score: 5
    }
  ],
  name: 'Phoenix Garden',
  restaurant_id: '40398475'
},
{
  _id: ObjectId('663a2760414535b89dc79334'),
  address: {
    building: '145',
    coord: [ -73.973939, 40.748619 ],
    street: 'East 40 Street',
    zipcode: '10016'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-11-14T00:00:00.000Z'),
      grade: 'Z',
      score: 25
    },
    {
      date: ISODate('2013-12-12T00:00:00.000Z'),
      grade: 'B',
      score: 18
    },
    {
      date: ISODate('2013-05-07T00:00:00.000Z'),
      grade: 'B',
      score: 14
    },
    {
      date: ISODate('2012-09-17T00:00:00.000Z'),
      grade: 'A',
      score: 5
    }
  ],
  name: 'Phoenix Garden',
  restaurant_id: '40398475'
}
```

```
        coord: [ -73.980223, 40.77832799999999 ],
        street: 'West 72 Street',
        zipcode: '10023'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-10-28T00:00:00.000Z'),
            grade: 'C',
            score: 31
        },
        {
            date: ISODate('2014-04-21T00:00:00.000Z'),
            grade: 'A',
            score: 11
        },
        {
            date: ISODate('2013-08-26T00:00:00.000Z'),
            grade: 'B',
            score: 25
        },
        {
            date: ISODate('2012-12-13T00:00:00.000Z'),
            grade: 'A',
            score: 12
        },
        {
            date: ISODate('2012-07-02T00:00:00.000Z'),
            grade: 'A',
            score: 5
        },
        {
            date: ISODate('2012-03-13T00:00:00.000Z'),
            grade: 'C',
            score: 12
        }
    ],
    name: 'Dinastia China',
    restaurant_id: '40398572'
},
{
    _id: ObjectId('663a2760414535b89dc793ab'),
    address: {
        building: '236',
        coord: [ -73.9681399999999, 40.756938 ],
        street: 'East 53 Street',
        zipcode: '10022'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-05-19T00:00:00.000Z'),
            grade: 'A',
            score: 12
        },
        {
            date: ISODate('2013-05-22T00:00:00.000Z'),
            grade: 'A',
            score: 12
        }
    ]
}
```

```
        date: ISODate('2012-12-05T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2012-05-14T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2011-10-27T00:00:00.000Z'),
        grade: 'B',
        score: 15
    }
],
name: 'Peking Duck House',
restaurant_id: '40400686'
},
{
_id: ObjectId('663a2760414535b89dc793e3'),
address: {
    building: '511',
    coord: [ -73.97331679999999, 40.75482770000001 ],
    street: 'Lexington Avenue',
    zipcode: '10017'
},
borough: 'Manhattan',
cuisine: 'Chinese',
grades: [
    {
        date: ISODate('2014-11-24T00:00:00.000Z'),
        grade: 'A',
        score: 4
    },
    {
        date: ISODate('2014-07-12T00:00:00.000Z'),
        grade: 'B',
        score: 19
    },
    {
        date: ISODate('2013-12-17T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2013-05-01T00:00:00.000Z'),
        grade: 'A',
        score: 11
    },
    {
        date: ISODate('2012-09-05T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2012-04-05T00:00:00.000Z'),
        grade: 'A',
        score: 7
    }
],
name: 'S Dynasty',
restaurant_id: '40401691'
```

```
{
  _id: ObjectId('663a2760414535b89dc793e4'),
  address: {
    building: '1728',
    coord: [ -73.9460515999999, 40.7986678 ],
    street: 'Madison Avenue',
    zipcode: '10029'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-12-15T00:00:00.000Z'),
      grade: 'A',
      score: 9
    },
    {
      date: ISODate('2014-07-19T00:00:00.000Z'),
      grade: 'A',
      score: 12
    },
    {
      date: ISODate('2013-05-31T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2012-05-04T00:00:00.000Z'),
      grade: 'A',
      score: 9
    }
  ],
  name: 'Oriental Palace Kitchen',
  restaurant_id: '40401707'
},
{
  _id: ObjectId('663a2760414535b89dc793e8'),
  address: {
    building: '62',
    coord: [ -74.0084409999999, 40.707058 ],
    street: 'William Street',
    zipcode: '10005'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-08-07T00:00:00.000Z'),
      grade: 'A',
      score: 2
    }
  ]
}
```

```
        grade: 'A',
        score: 8
    },
    {
        date: ISODate('2013-03-06T00:00:00.000Z'),
        grade: 'C',
        score: 11
    },
    {
        date: ISODate('2012-08-28T00:00:00.000Z'),
        grade: 'B',
        score: 19
    },
    {
        date: ISODate('2012-08-06T00:00:00.000Z'),
        grade: 'P',
        score: 10
    },
    {
        date: ISODate('2012-03-21T00:00:00.000Z'),
        grade: 'C',
        score: 31
    },
    {
        date: ISODate('2011-09-07T00:00:00.000Z'),
        grade: 'B',
        score: 25
    }
],
name: 'Oriental Express',
restaurant_id: '40401775'
},
{
    _id: ObjectId('663a2760414535b89dc7946c'),
    address: {
        building: '27',
        coord: [ -73.9968312, 40.7126429 ],
        street: 'Catherine Street',
        zipcode: '10038'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-06-02T00:00:00.000Z'),
            grade: 'A',
            score: 13
        },
        {
            date: ISODate('2013-06-06T00:00:00.000Z'),
            grade: 'A',
            score: 10
        },
        {
            date: ISODate('2013-01-09T00:00:00.000Z'),
            grade: 'A',
            score: 4
        },
        {
            date: ISODate('2011-12-09T00:00:00.000Z'),
            grade: 'A',
            score: 10
        }
    ]
}
```

```
{
  date: ISODate('2011-08-17T00:00:00.000Z'),
  grade: 'A',
  score: 13
}
],
name: 'Manna One Bakery',
restaurant_id: '40424780'
},
{
  _id: ObjectId('663a2760414535b89dc7946e'),
  address: {
    building: '87',
    coord: [ -73.9938095, 40.7135376 ],
    street: 'East Broadway',
    zipcode: '10002'
  },
  borough: 'Manhattan',
  cuisine: 'Chinese',
  grades: [
    {
      date: ISODate('2014-05-01T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-11-25T00:00:00.000Z'),
      grade: 'A',
      score: 10
    },
    {
      date: ISODate('2013-06-21T00:00:00.000Z'),
      grade: 'A',
      score: 13
    },
    {
      date: ISODate('2012-11-16T00:00:00.000Z'),
      grade: 'B',
      score: 19
    },
    {
      date: ISODate('2012-06-07T00:00:00.000Z'),
      grade: 'A',
      score: 8
    },
    {
      date: ISODate('2011-12-23T00:00:00.000Z'),
      grade: 'B',
      score: 20
    },
    {
      date: ISODate('2011-10-21T00:00:00.000Z'),
      grade: 'P',
      score: 0
    }
  ]
}
```

```
        coord: [ -74.01303759999999, 40.70661 ],
        street: 'Broadway',
        zipcode: '10006'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-03-31T00:00:00.000Z'),
            grade: 'A',
            score: 11
        },
        {
            date: ISODate('2013-09-30T00:00:00.000Z'),
            grade: 'A',
            score: 13
        },
        {
            date: ISODate('2013-04-10T00:00:00.000Z'),
            grade: 'B',
            score: 27
        },
        {
            date: ISODate('2013-03-27T00:00:00.000Z'),
            grade: 'P',
            score: 11
        },
        {
            date: ISODate('2012-10-01T00:00:00.000Z'),
            grade: 'A',
            score: 12
        },
        {
            date: ISODate('2012-05-08T00:00:00.000Z'),
            grade: 'A',
            score: 7
        },
        {
            date: ISODate('2011-11-23T00:00:00.000Z'),
            grade: 'A',
            score: 11
        },
        {
            date: ISODate('2011-07-01T00:00:00.000Z'),
            grade: 'A',
            score: 8
        }
    ],
    name: 'China Chalet',
    restaurant_id: '40512403'
},
```

```
        },
        {
            date: ISODate('2011-07-01T00:00:00.000Z'),
            grade: 'A',
            score: 8
        }
    ],
    name: 'China Chalet',
    restaurant_id: '40512403'
},
{
    _id: ObjectId('663a2760414535b89dc795b8'),
    address: {
        building: '9',
        coord: [ -73.9977660999999, 40.7146297 ],
        street: 'Pell Street',
        zipcode: '10013'
    },
    borough: 'Manhattan',
    cuisine: 'Chinese',
    grades: [
        {
            date: ISODate('2014-07-08T00:00:00.000Z'),
            grade: 'A',
            score: 12
        },
        {
            date: ISODate('2014-01-18T00:00:00.000Z'),
            grade: 'A',
            score: 13
        },
        {
            date: ISODate('2013-06-04T00:00:00.000Z'),
            grade: 'B',
            score: 22
        },
        {
            date: ISODate('2012-12-17T00:00:00.000Z'),
            grade: 'B',
            score: 21
        },
        {
            date: ISODate('2012-05-29T00:00:00.000Z'),
            grade: 'C',
            score: 50
        },
        {
            date: ISODate('2012-01-03T00:00:00.000Z'),
            grade: 'B',
            score: 22
        },
        {
            date: ISODate('2011-08-01T00:00:00.000Z'),
            grade: 'B',
            score: 27
        }
    ]
}
```

- 6.** Show the restaurants that achieved a score, more than 90 but less than 100.
 - o db.restaurants.find({"grades.score": { "\$gt": 90, "\$lt": 100 }})

```
[  
 {  
   _id: ObjectId('663a2760414535b89dc79044'),  
   address: {  
     building: '65',  
     coord: [ -73.9782725, 40.7624022 ],  
     street: 'West 54 Street',  
     zipcode: '10019'  
   },  
   borough: 'Manhattan',  
   cuisine: 'American',  
   grades: [  
     {  
       date: ISODate('2014-08-22T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2014-03-28T00:00:00.000Z'),  
       grade: 'C',  
       score: 131  
     },  
     {  
       date: ISODate('2013-09-25T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2013-04-08T00:00:00.000Z'),  
       grade: 'B',  
       score: 25  
     },  
     {  
       date: ISODate('2012-10-15T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2011-10-19T00:00:00.000Z'),  
       grade: 'A',  
       score: 13  
     }  
   ],  
   name: "Murals On 54/Randolph's S",  
   restaurant_id: '40372466'  
 },  
 {  
   _id: ObjectId('663a2760414535b89dc790e5'),  
   address: {  
     building: '345',  
     coord: [ -73.9864626, 40.7266739 ],  
     street: 'East 6 Street',  
     zipcode: '10003'  
   },  
   borough: 'Manhattan',  
   cuisine: 'American',  
   grades: [  
     {  
       date: ISODate('2014-08-22T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2014-03-28T00:00:00.000Z'),  
       grade: 'C',  
       score: 131  
     },  
     {  
       date: ISODate('2013-09-25T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2013-04-08T00:00:00.000Z'),  
       grade: 'B',  
       score: 25  
     },  
     {  
       date: ISODate('2012-10-15T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2011-10-19T00:00:00.000Z'),  
       grade: 'A',  
       score: 13  
     }  
   ]  
 }]
```

```
        date: ISODate('2014-01-14T00:00:00.000Z'),
        grade: 'A',
        score: 8
    },
    {
        date: ISODate('2013-05-30T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2013-04-24T00:00:00.000Z'),
        grade: 'P',
        score: 2
    },
    {
        date: ISODate('2012-10-01T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2012-04-06T00:00:00.000Z'),
        grade: 'C',
        score: 92
    },
    {
        date: ISODate('2011-11-03T00:00:00.000Z'),
        grade: 'C',
        score: 41
    }
],
name: 'Gandhi',
restaurant_id: '40381295'
},
{
_id: ObjectId('663a2760414535b89dc79248'),
address: {
    building: '130',
    coord: [ -73.984758, 40.7457939 ],
    street: 'Madison Avenue',
    zipcode: '10016'
},
borough: 'Manhattan',
cuisine: 'Pizza/Italian',
grades: [
    {
        date: ISODate('2014-12-24T00:00:00.000Z'),
        grade: 'Z',
        score: 31
    },
    {
        date: ISODate('2014-06-17T00:00:00.000Z'),
        grade: 'C',
        score: 98
    },
    {
        date: ISODate('2013-12-12T00:00:00.000Z'),
        grade: 'C',
        score: 32
    },
    {
        date: ISODate('2013-05-22T00:00:00.000Z'),
        grade: 'B',
        score: 21
    }
]
```

```
        score: 2
    },
    {
        date: ISODate('2012-10-01T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2012-04-06T00:00:00.000Z'),
        grade: 'C',
        score: 92
    },
    {
        date: ISODate('2011-11-03T00:00:00.000Z'),
        grade: 'C',
        score: 41
    }
],
name: 'Gandhi',
restaurant_id: '40381295'
},
{
_id: ObjectId('663a2760414535b89dc79248'),
address: {
    building: '130',
    coord: [ -73.984758, 40.7457939 ],
    street: 'Madison Avenue',
    zipcode: '10016'
},
borough: 'Manhattan',
cuisine: 'Pizza/Italian',
grades: [
    {
        date: ISODate('2014-12-24T00:00:00.000Z'),
        grade: 'Z',
        score: 31
    },
    {
        date: ISODate('2014-06-17T00:00:00.000Z'),
        grade: 'C',
        score: 98
    },
    {
        date: ISODate('2013-12-12T00:00:00.000Z'),
        grade: 'C',
        score: 32
    },
    {
        date: ISODate('2013-05-22T00:00:00.000Z'),
        grade: 'B',
        score: 21
    },
    {
        date: ISODate('2012-05-02T00:00:00.000Z'),
        grade: 'A',
        score: 11
    }
],
name: 'Bella Napoli',
restaurant_id: '40393488'
}
```

7. Show the restaurant id, name, borough and cuisine for those restaurants which belong to the borough Staten Island or Queens or Bronx or Brooklyn.
 - o db.restaurants.find({"borough": { "\$in": ["Staten Island", "Queens", "Bronx", "Brooklyn"] } }, {"restaurant_id": 1, "name": 1, "borough": 1, "cuisine": 1 })

```
[  
 {  
   _id: ObjectId('663a2760414535b89dc79044'),  
   address: {  
     building: '65',  
     coord: [ -73.9782725, 40.7624022 ],  
     street: 'West 54 Street',  
     zipcode: '10019'  
   },  
   borough: 'Manhattan',  
   cuisine: 'American',  
   grades: [  
     {  
       date: ISODate('2014-08-22T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2014-03-28T00:00:00.000Z'),  
       grade: 'C',  
       score: 131  
     },  
     {  
       date: ISODate('2013-09-25T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2013-04-08T00:00:00.000Z'),  
       grade: 'B',  
       score: 25  
     },  
     {  
       date: ISODate('2012-10-15T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2011-10-19T00:00:00.000Z'),  
       grade: 'A',  
       score: 13  
     }  
   ],  
   name: "Murals On 54/Randolph's S",  
   restaurant_id: '40372466'  
 },  
 {  
   _id: ObjectId('663a2760414535b89dc790e5'),  
   address: {  
     building: '345',  
     coord: [ -73.9864626, 40.7266739 ],  
     street: 'East 6 Street',  
     zipcode: '10003'  
   },  
   borough: 'Manhattan',  
   cuisine: 'American',  
   grades: [  
     {  
       date: ISODate('2014-08-22T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2014-03-28T00:00:00.000Z'),  
       grade: 'C',  
       score: 131  
     },  
     {  
       date: ISODate('2013-09-25T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2013-04-08T00:00:00.000Z'),  
       grade: 'B',  
       score: 25  
     },  
     {  
       date: ISODate('2012-10-15T00:00:00.000Z'),  
       grade: 'A',  
       score: 11  
     },  
     {  
       date: ISODate('2011-10-19T00:00:00.000Z'),  
       grade: 'A',  
       score: 13  
     }  
   ]  
 }]
```

```
        date: ISODate('2014-01-14T00:00:00.000Z'),
        grade: 'A',
        score: 8
    },
    {
        date: ISODate('2013-05-30T00:00:00.000Z'),
        grade: 'A',
        score: 12
    },
    {
        date: ISODate('2013-04-24T00:00:00.000Z'),
        grade: 'P',
        score: 2
    },
    {
        date: ISODate('2012-10-01T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2012-04-06T00:00:00.000Z'),
        grade: 'C',
        score: 92
    },
    {
        date: ISODate('2011-11-03T00:00:00.000Z'),
        grade: 'C',
        score: 41
    }
],
name: 'Gandhi',
restaurant_id: '40381295'
},
{
    _id: ObjectId('663a2760414535b89dc79248'),
    address: {
        building: '130',
        coord: [ -73.984758, 40.7457939 ],
        street: 'Madison Avenue',
        zipcode: '10016'
    },
    borough: 'Manhattan',
    cuisine: 'Pizza/Italian',
    grades: [
        {
            date: ISODate('2014-12-24T00:00:00.000Z'),
            grade: 'Z',
            score: 31
        },
        {
            date: ISODate('2014-06-17T00:00:00.000Z'),
            grade: 'C',
            score: 98
        },
        {
            date: ISODate('2013-12-12T00:00:00.000Z'),
            grade: 'A',
            score: 95
        }
    ]
}
```

```
        score: 2
    },
    {
        date: ISODate('2012-10-01T00:00:00.000Z'),
        grade: 'A',
        score: 9
    },
    {
        date: ISODate('2012-04-06T00:00:00.000Z'),
        grade: 'C',
        score: 92
    },
    {
        date: ISODate('2011-11-03T00:00:00.000Z'),
        grade: 'C',
        score: 41
    }
],
name: 'Gandhi',
restaurant_id: '40381295'
},
{
    _id: ObjectId('663a2760414535b89dc79248'),
    address: {
        building: '130',
        coord: [ -73.984758, 40.7457939 ],
        street: 'Madison Avenue',
        zipcode: '10016'
    },
    borough: 'Manhattan',
    cuisine: 'Pizza/Italian',
    grades: [
        {
            date: ISODate('2014-12-24T00:00:00.000Z'),
            grade: 'Z',
            score: 31
        },
        {
            date: ISODate('2014-06-17T00:00:00.000Z'),
            grade: 'C',
            score: 98
        },
        {
            date: ISODate('2013-12-12T00:00:00.000Z'),
            grade: 'C',
            score: 32
        },
        {
            date: ISODate('2013-05-22T00:00:00.000Z'),
            grade: 'B',
            score: 21
        }
    ]
}
```

```
[  
  {  
    _id: ObjectId('663a2760414535b89dc78ee6'),  
    borough: 'Bronx',  
    cuisine: 'Bakery',  
    name: 'Morris Park Bake Shop',  
    restaurant_id: '30075445'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78ee7'),  
    borough: 'Brooklyn',  
    cuisine: 'Hamburgers',  
    name: "Wendy'S",  
    restaurant_id: '30112340'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78ee9'),  
    borough: 'Brooklyn',  
    cuisine: 'American ',  
    name: 'Riviera Caterer',  
    restaurant_id: '40356018'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78eea'),  
    borough: 'Queens',  
    cuisine: 'Jewish/Kosher',  
    name: 'Tov Kosher Kitchen',  
    restaurant_id: '40356068'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78eeb'),  
    borough: 'Queens',  
    cuisine: 'American ',  
    name: 'Brunos On The Boulevard',  
    restaurant_id: '40356151'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78eec'),  
    borough: 'Queens',  
    cuisine: 'American ',  
    name: 'Cafe 28',  
    restaurant_id: '40356152'  
  }]
```

```
},
{
  _id: ObjectId('663a2760414535b89dc78ef1'),
  borough: 'Brooklyn',
  cuisine: 'American',
  name: 'C & C Catering Service',
  restaurant_id: '40357437'
},
{
  _id: ObjectId('663a2760414535b89dc78ef2'),
  borough: 'Brooklyn',
  cuisine: 'Chinese',
  name: 'May May Kitchen',
  restaurant_id: '40358429'
},
{
  _id: ObjectId('663a2760414535b89dc78ef4'),
  borough: 'Brooklyn',
  cuisine: 'Jewish/Kosher',
  name: 'Seuda Foods',
  restaurant_id: '40360045'
},
{
  _id: ObjectId('663a2760414535b89dc78ef5'),
  borough: 'Brooklyn',
  cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
  name: 'Carvel Ice Cream',
  restaurant_id: '40360076'
},
{
  _id: ObjectId('663a2760414535b89dc78ef6'),
  borough: 'Queens',
  cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
  name: 'Carvel Ice Cream',
  restaurant_id: '40361322'
},
{
  _id: ObjectId('663a2760414535b89dc78ef7'),
  borough: 'Brooklyn',
  cuisine: 'Delicatessen',
  name: 'Nordic Delicacies',
  restaurant_id: '40361390'
},
{
  _id: ObjectId('663a2760414535b89dc78ef9'),
  borough: 'Brooklyn',
  cuisine: 'American',
  name: 'The Movable Feast',
  restaurant_id: '40361606'
},
{
  _id: ObjectId('663a2760414535b89dc78efa'),
  borough: 'Queens',
  cuisine: 'Delicatessen',
  name: "Sal'S Deli",
  restaurant_id: '40361618'
},
{
  _id: ObjectId('663a2760414535b89dc78efc'),
  borough: 'Queens',
```

```
},
{
  _id: ObjectId('663a2760414535b89dc78ef4'),
  borough: 'Brooklyn',
  cuisine: 'Jewish/Kosher',
  name: 'Seuda Foods',
  restaurant_id: '40360045'
},
{
  _id: ObjectId('663a2760414535b89dc78ef5'),
  borough: 'Brooklyn',
  cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
  name: 'Carvel Ice Cream',
  restaurant_id: '40360076'
},
{
  _id: ObjectId('663a2760414535b89dc78ef6'),
  borough: 'Queens',
  cuisine: 'Ice Cream, Gelato, Yogurt, Ices',
  name: 'Carvel Ice Cream',
  restaurant_id: '40361322'
},
{
  _id: ObjectId('663a2760414535b89dc78ef7'),
  borough: 'Brooklyn',
  cuisine: 'Delicatessen',
  name: 'Nordic Delicacies',
  restaurant_id: '40361390'
},
{
  _id: ObjectId('663a2760414535b89dc78ef9'),
  borough: 'Brooklyn',
  cuisine: 'American',
  name: 'The Movable Feast',
  restaurant_id: '40361606'
},
{
  _id: ObjectId('663a2760414535b89dc78efa'),
  borough: 'Queens',
  cuisine: 'Delicatessen',
  name: "Sal'S Deli",
  restaurant_id: '40361618'
},
{
  _id: ObjectId('663a2760414535b89dc78efc'),
  borough: 'Queens',
  cuisine: 'Delicatessen',
  name: "Steve Chu'S Deli & Grocery",
  restaurant_id: '40361998'
},
{
  _id: ObjectId('663a2760414535b89dc78f00'),
  borough: 'Brooklyn',
  cuisine: 'Hamburgers',
  name: 'White Castle',
  restaurant_id: '40362344'
}
```

- 8.** Show 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.
 - o db.restaurants.find({"borough": { "\$nin": ["Staten Island", "Queens", "Bronx", "Brooklyn"] } }, { "restaurant_id": 1, "name": 1, "borough": 1, "cuisine": 1 })

```
[  
  {  
    _id: ObjectId('663a2760414535b89dc78ee8'),  
    borough: 'Manhattan',  
    cuisine: 'Irish',  
    name: 'Dj Reynolds Pub And Restaurant',  
    restaurant_id: '30191841'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78ef3'),  
    borough: 'Manhattan',  
    cuisine: 'American ',  
    name: '1 East 66Th Street Kitchen',  
    restaurant_id: '40359480'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78ef8'),  
    borough: 'Manhattan',  
    cuisine: 'American ',  
    name: 'Glorious Food',  
    restaurant_id: '40361521'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78efb'),  
    borough: 'Manhattan',  
    cuisine: 'Delicatessen',  
    name: "Bully'S Deli",  
    restaurant_id: '40361708'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78efd'),  
    borough: 'Manhattan',  
    cuisine: 'Chicken',  
    name: "Harriet'S Kitchen",  
    restaurant_id: '40362098'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78efe'),  
    borough: 'Manhattan',  
    cuisine: 'American ',  
    name: 'P & S Deli Grocery',  
    restaurant_id: '40362264'  
  },  
  {  
    _id: ObjectId('663a2760414535b89dc78eff'),  
    borough: 'Manhattan',  
    cuisine: 'American ',  
    name: 'Angelika Film Center',  
    restaurant_id: '40362274'  
},  
]
```

```
},
{
  _id: ObjectId('663a2760414535b89dc78f08'),
  borough: 'Manhattan',
  cuisine: 'Bakery',
  name: "Olive'S",
  restaurant_id: '40363151'
},
{
  _id: ObjectId('663a2760414535b89dc78f0a'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Cafe Metro',
  restaurant_id: '40363298'
},
{
  _id: ObjectId('663a2760414535b89dc78f0c'),
  borough: 'Manhattan',
  cuisine: 'Sandwiches/Salads/Mixed Buffet',
  name: 'Lexler Deli',
  restaurant_id: '40363426'
},
{
  _id: ObjectId('663a2760414535b89dc78f10'),
  borough: 'Manhattan',
  cuisine: 'Continental',
  name: "Lorenzo & Maria'S",
  restaurant_id: '40363630'
},
{
  _id: ObjectId('663a2760414535b89dc78f11'),
  borough: 'Manhattan',
  cuisine: 'Pizza',
  name: "Domino'S Pizza",
  restaurant_id: '40363644'
},
{
  _id: ObjectId('663a2760414535b89dc78f12'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Berkely',
  restaurant_id: '40363685'
},
{
  _id: ObjectId('663a2760414535b89dc78f16'),
  borough: 'Manhattan',
  cuisine: 'Pizza',
  name: "Domino'S Pizza"
}
```

```
},
{
  _id: ObjectId('663a2760414535b89dc78f12'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Berkely',
  restaurant_id: '40363685'
},
{
  _id: ObjectId('663a2760414535b89dc78f16'),
  borough: 'Manhattan',
  cuisine: 'Pizza',
  name: "Domino'S Pizza",
  restaurant_id: '40363945'
},
{
  _id: ObjectId('663a2760414535b89dc78f17'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Spoon Bread Catering',
  restaurant_id: '40364179'
},
{
  _id: ObjectId('663a2760414535b89dc78f1d'),
  borough: 'Manhattan',
  cuisine: 'Chicken',
  name: 'Texas Rotisserie',
  restaurant_id: '40364304'
},
{
  _id: ObjectId('663a2760414535b89dc78f20'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Metropolitan Club',
  restaurant_id: '40364347'
},
{
  _id: ObjectId('663a2760414535b89dc78f21'),
  borough: 'Manhattan',
  cuisine: 'American',
  name: 'Palm Restaurant',
  restaurant_id: '40364355'
}
]
```

Part B

1. Show the contents of original table in your mysql table
 - o SELECT * FROM Product
 - o

2. Show the contents of your collection (using find())
o db.products.find()


```
[  
  {  
    _id: ObjectId('663a55a9414535b89dc79dbe'),  
    product_id: 1,  
    name: 'Game Console',  
    price: 499.99,  
    description: 'Playstation 5',  
    E: [ 4, 7, 2 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dbf'),  
    product_id: 2,  
    name: 'Desktop',  
    price: 1199.99,  
    description: 'Master Gaming PC',  
    E: [ 1, 6 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc0'),  
    product_id: 3,  
    name: 'Laptop',  
    price: 1799.99,  
    description: 'MacBook Pro 14-inch ',  
    E: [ 8, 3, 5 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc1'),  
    product_id: 4,  
    name: 'Smartphone',  
    price: 1099.99,  
    description: 'Iphone 13 Pro Max',  
    E: [ 9, 2, 7 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc2'),  
    product_id: 5,  
    name: 'Headphones',  
    price: 349.99,  
    description: 'Beats Studio Pro',  
    E: [ 6, 4, 1 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc3'),  
    product_id: 6,  
    name: 'Tablet',  
    price: 999.99,  
    description: 'Ipad Pro 11-inch',  
    E: [ 3, 9 ]  
  },  
  {  
    id: ObjectId('663a55a9414535b89dc79dc4')  
}
```

```
{
  "_id": ObjectId('663a55a9414535b89dc79dc6'),
  "product_id": 9,
  "name": 'Printer',
  "price": 249.99,
  "description": 'HP Officejet Pro 9010',
  "E": [ 1, 9, 6 ]
},
{
  "_id": ObjectId('663a55a9414535b89dc79dc7'),
  "product_id": 10,
  "name": 'TV',
  "price": 299.99,
  "description": 'Roku 55-inch 4K Smart TV',
  "E": [ 8, 4, 2 ]
},
{
  "_id": ObjectId('663a55a9414535b89dc79dc8'),
  "product_id": 11,
  "name": 'Computer Monitor',
  "price": 299.99,
  "description": 'Samsung Odyssey 32-inch',
  "E": [ 3, 6 ]
},
{
  "_id": ObjectId('663a55a9414535b89dc79dc9'),
  "product_id": 12,
  "name": 'Wireless Router',
  "price": 149.99,
  "description": 'NETGEAR Nighthawk',
  "E": [ 2, 7, 4 ]
},
{
  "_id": ObjectId('663a55a9414535b89dc79dca'),
  "product_id": 13,
  "name": 'Bluetooth Speaker',
  "price": 175.99,
  "description": 'JBL Charge 5',
  "E": [ 5, 1, 8 ]
},
{
  "_id": ObjectId('663a55a9414535b89dc79dcbb'),
  "product_id": 14,
  "name": 'Wireless Earbuds',
  "price": 149.99,
  "description": 'AirPod Pro',
  "E": [ 6, 3, 9 ]
}
]
```

3. Execute ONE mql command for each of the following clauses. Show a) the query in plain English, (explain what this query is about), b) the corresponding MQL command, and c) the results of the command
 - use projection
 - This query retrieves only specific fields from the documents in the collection.
 - db.products.find({}, { "name": 1, "price": 1, "_id": 0 })

```
[  
  { name: 'Game Console', price: 499.99 },  
  { name: 'Desktop', price: 1199.99 },  
  { name: 'Laptop', price: 1799.99 },  
  { name: 'Smartphone', price: 1099.99 },  
  { name: 'Headphones', price: 349.99 },  
  { name: 'Tablet', price: 999.99 },  
  { name: 'Camera', price: 599.99 },  
  { name: 'Smartwatch', price: 399.99 },  
  { name: 'Printer', price: 249.99 },  
  { name: 'TV', price: 299.99 },  
  { name: 'Computer Monitor', price: 299.99 },  
  { name: 'Wireless Router', price: 149.99 },  
  { name: 'Bluetooth Speaker', price: 175.99 },  
  { name: 'Wireless Earbuds', price: 149.99 }  
]
```

- use comparison operator
 - This query retrieves documents where the “price” field is greater than 500.
 - db.products.find({ "price": { \$gt: 500 } })

```

[{"_id": ObjectId('663a55a9414535b89dc79dcf'), "product_id": 2, "name": "Desktop", "price": 1199.99, "description": "Master Gaming PC", "E": [ 1, 6 ]}, {"_id": ObjectId('663a55a9414535b89dc79dc0'), "product_id": 3, "name": "Laptop", "price": 1799.99, "description": "MacBook Pro 14-inch", "E": [ 8, 3, 5 ]}, {"_id": ObjectId('663a55a9414535b89dc79dc1'), "product_id": 4, "name": "Smartphone", "price": 1099.99, "description": "Iphone 13 Pro Max", "E": [ 9, 2, 7 ]}, {"_id": ObjectId('663a55a9414535b89dc79dc3'), "product_id": 6, "name": "Tablet", "price": 999.99, "description": "Ipad Pro 11-inch", "E": [ 3, 9 ]}, {"_id": ObjectId('663a55a9414535b89dc79dc4'), "product_id": 7, "name": "Camera", "price": 599.99, "description": "Cannon EOS Rebel T7", "E": [ 5, 8, 2 ]}]
]

```

- use \$and and \$or operator
 - This query retrieves documents where either the “price” field is less than 200 or the name field contains the word “smartphone”.
 - db.products.find({ \$or: [{ "price": { \$lt: 200 } }, { "name": { \$regex: "smartphone", \$options: "i" } }] })

```
[  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc1'),  
    product_id: 4,  
    name: 'Smartphone',  
    price: 1099.99,  
    description: 'Iphone 13 Pro Max',  
    E: [ 9, 2, 7 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dc9'),  
    product_id: 12,  
    name: 'Wireless Router',  
    price: 149.99,  
    description: 'NETGEAR Nighthawk',  
    E: [ 2, 7, 4 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dca'),  
    product_id: 13,  
    name: 'Bluetooth Speaker',  
    price: 175.99,  
    description: 'JBL Charge 5',  
    E: [ 5, 1, 8 ]  
  },  
  {  
    _id: ObjectId('663a55a9414535b89dc79dcb'),  
    product_id: 14,  
    name: 'Wireless Earbuds',  
    price: 149.99,  
    description: 'AirPod Pro',  
    E: [ 6, 3, 9 ]  
  }  
]
```

- use \$all operator
 - This query retrieves documents where the “keywords” array contains all of the specified values.
 - db.products.find({ "keywords": { \$all: ["technology", "electronics"] } })
 - ```
ecommerce_db> db.products.find({ "keywords": { $all: ["technology", "electronics"] } })
```
- use \$elemMatch operator
  - This query retrieves documents where at least one element in the “reviews” array meets both of the specified conditions.

- db.products.find({ "reviews": { \$elemMatch: { "score": { \$gt: 3 }, "date": { \$gte: ISODate("2023-01-01T00:00:00.000Z") } } }})

- 

```
ecommerce_db> db.products.find({ "reviews": { $elemMatch: { "score": { $gt: 3 }, "date": { $gte: ISODate("2023-01-01T00:00:00.000Z") } } } })
```