MONGODB Project

Basic Section

Data Set

```
{  "_id ": 1 ,

      "name" : "Anand Mishra",

      "Course" : "Btech",

      "batch_year" : 2018,

    "dob" : ISODate("2008-12-04"),

"language" : ["c++", "java", "python"],

      "personal_details" :

          {

"Father_name" : "Deepak Mishra",

        "phone_no" : 8895321456,

            "age" : 23,

            "gender" : "Male",

            "City" : "Lucknow",

        }      },{"_id" : 2,

      "name" : "Zoya Akram",

      "Course" : "BCA",

      "batch_year" : 2020,

    "dob" : ISODate("2002-11-14"),

  "language" : ["C#", "JavaScript"],

  "personal_details" :

            {

  "Father_name" : "Ahmed Javed",

        "phone_no" : 9874563698,

            "age" : 20,

            "gender" : "Female",

            "City" : "Hyderabad",  }},{    "_id" : 3,
```

```
        "name" : "Mahadevaswamy",

        "Course" : "MCA",

        "batch_year" : 2019,

      "dob" : ISODate("2004-05-24"),

 "language" : ["C#", "java", "PHP"],

        "personal_details" :

                {

"Father_name" : "Nanjudaswamy",        "phone_no" : 7845123698,

             "age" : 24,

             "gender" : "Male",

             "City" : "Bangalore",  }  },{"_id" : 4,

      "name" : "Priya Sawant",

      "Course" : "MTech",

      "batch_year" : 2017,

     "dob" : ISODate("2006-07-30"),

      "language" : ["c", "PHP"],

      "personal_details" :

                {

 "Father_name" : "Ashok Sawant",

"phone_no" : 9997845123,

             "age" : 25,

             "gender" : "Female",

      "City" : "Mumbai",

             } },{  "_id" : 5,

     "name" : "Ramya Gowda",

     "Course" : "Btech",

     "batch_year" : 2020,

     "dob" : ISODate("2008-08-16"),

     "language" : ["HTML", "CSS", "PHP"],
```

```
        "personal_details" :

                {

                "Father_name" : "Arjun Gowda",

                "phone_no" : 6312547896,

                "age" : 22,

                "gender" : "Female",

                "City" : "Bangalore"}}
```

>use student

>db.details.insertMany([{ "_id ": 1 ,

      "name" : "Anand Mishra",

      "Course" : "Btech",

      "batch_year" : 2018,

     "dob" : ISODate("2008-12-04"),

 "language" : ["c++", "java", "python"],

      "personal_details" :

        {

"Father_name" : "Deepak Mishra",

      "phone_no" : 8895321456,

          "age" : 23,

          "gender" : "Male",

          "City" : "Lucknow",

     }   },{"_id" : 2,

      "name" : "Zoya Akram",

      "Course" : "BCA",

      "batch_year" : 2020,

    "dob" : ISODate("2002-11-14"),

  "language" : ["C#", "JavaScript"],

  "personal_details" :

        {

"Father_name" : "Ahmed Javed",

"phone_no" : 9874563698,

"age" : 20,

"gender" : "Female",

"City" : "Hyderabad", }},{   "_id" : 3,

"name" : "Mahadevaswamy",

"Course" : "MCA",

"batch_year" : 2019,

"dob" : ISODate("2004-05-24"),

"language" : ["C#", "java", "PHP"],

"personal_details" :

{

"Father_name" : "Nanjudaswamy",   "phone_no" : 7845123698,

"age" : 24,

"gender" : "Male",

"City" : "Bangalore", } },{"_id" : 4,

"name" : "Priya Sawant",

"Course" : "MTech",

"batch_year" : 2017,

"dob" : ISODate("2006-07-30"),

"language" : ["c", "PHP"],

"personal_details" :

{

"Father_name" : "Ashok Sawant",

"phone_no" : 9997845123,

"age" : 25,

"gender" : "Female",

"City" : "Mumbai",

} },{ "_id" : 5,

"name" : "Ramya Gowda",

"Course" : "Btech",

"batch_year" : 2020,

"dob" : ISODate("2008-08-16"),

"language" : ["HTML", "CSS", "PHP"],

"personal_details" :

    {

    "Father_name" : "Arjun Gowda",

    "phone_no" : 6312547896,

    "age" : 22,

    "gender" : "Female",

    "City" : "Bangalore"}}])

```
< {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId('6835a76251785fcb1ce4654c'),
      '1': 2,
      '2': 3,
      '3': 4,
      '4': 5
    }
  }
```

1.Simple Fetch with Nested Documents, Display Only Name, Personal_Details.Phone_No

>db.details.find({}, { name: 1, "personal_details.phone_no": 1, _id: 0 })

```
>_MONGOSH
> db.details.find({}, { name: 1, "personal_details.phone_no": 1, _id: 0 })
< {
    name: 'Anand Mishra',
    personal_details: {
      phone_no: 8895321456
    }
  }
  {
    name: 'Zoya Akram',
    personal_details: {
      phone_no: 9874563698
    }
  }
  {
    name: 'Mahadevaswamy',
    personal_details: {
      phone_no: 7845123698
    }
  }
  {
    name: 'Priya Sawant',
    personal_details: {
      phone_no: 9997845123
    }
  }
  {
    name: 'Ramya Gowda',
    personal_details: {
      phone_no: 6312547896
```

2. Simple Fetch Involving Nested Documents And Sort Name Asc

>db.details.find({}, { name: 1,"personal_details": 1,   _id: 0 }).sort({ name: 1 })

```
> db.details.find({}, { name: 1,"personal_details": 1,   _id: 0 }).sort({ name: 1 })
< {
    name: 'Anand Mishra',
    personal_details: {
      Father_name: 'Deepak Mishra',
      phone_no: 8895321456,
      age: 23,
      gender: 'Male',
      City: 'Lucknow'
    }
  }
  {
    name: 'Mahadevaswamy',
    personal_details: {
      Father_name: 'Nanjudaswamy',
      phone_no: 7845123698,
      age: 24,
      gender: 'Male',
      City: 'Bangalore'
    }
  }
  {
    name: 'Priya Sawant',
    personal_details: {
      Father_name: 'Ashok Sawant',
      phone_no: 9997845123,
      age: 25,
      gender: 'Female',
      City: 'Mumbai'
```

```
  {
    name: 'Ramya Gowda',
    personal_details: {
      Father_name: 'Arjun Gowda',
      phone_no: 6312547896,
      age: 22,
      gender: 'Female',
      City: 'Bangalore'
    }
  }
  {
    name: 'Zoya Akram',
    personal_details: {
      Father_name: 'Ahmed Javed',
      phone_no: 9874563698,
      age: 20,
      gender: 'Female',
      City: 'Hyderabad'
    }
  }
```

3. Simple Fetch Involving Nested Documents and Sort Name Desc

>db.details.find({}, { name: 1,"personal_details.phone_no": 1, _id: 0 }).sort({ name: -1})

```
> db.details.find({}, { name: 1,"personal_details.phone_no": 1,   _id: 0 }).sort({ name: -1})
< {
    name: 'Zoya Akram',
    personal_details: {
      phone_no: 9874563698
    }
  }
  {
    name: 'Ramya Gowda',
    personal_details: {
      phone_no: 6312547896
    }
  }
  {
    name: 'Priya Sawant',
    personal_details: {
      phone_no: 9997845123
    }
  }
  {
    name: 'Mahadevaswamy',
    personal_details: {
      phone_no: 7845123698
    }
  }
```

```
  {
    name: 'Anand Mishra',
    personal_details: {
      phone_no: 8895321456
    }
  }
```

4. Simple Fetch Involving Nested Documents and Sort Course Asc

>db.details.find({}, { name: 1, "Course": 1, _id: 0 }).sort({ "Course": 1 })

```
> db.details.find({}, { name: 1, "Course": 1, _id: 0 }).sort({ "Course": 1 })

< {
    name: 'Zoya Akram',
    Course: 'BCA'
  }
  {
    name: 'Anand Mishra',
    Course: 'Btech'
  }
  {
    name: 'Ramya Gowda',
    Course: 'Btech'
  }
  {
    name: 'Mahadevaswamy',
    Course: 'MCA'
  }
  {
    name: 'Priya Sawant',
    Course: 'MTech'
  }
```

5. Simple Fetch Involving Nested Documents And Sort dob Acs

>db.details.find({}, { name: 1, "dob": 1, _id: 0 }).sort({ "dob": 1 })

```
> db.details.find({}, { name: 1, "dob": 1, _id: 0 }).sort({ "dob": 1 })

< {
    name: 'Zoya Akram',
    dob: 2002-11-14T00:00:00.000Z
  }
  {
    name: 'Mahadevaswamy',
    dob: 2004-05-24T00:00:00.000Z
  }
  {
    name: 'Priya Sawant',
    dob: 2006-07-30T00:00:00.000Z
  }
  {
    name: 'Ramya Gowda',
    dob: 2008-08-16T00:00:00.000Z
  }
  {
    name: 'Anand Mishra',
    dob: 2008-12-04T00:00:00.000Z
  }
```

6. Simple Fetch Involving Nested Documents And Sort Dob Desc

>db.details.find({}, { name: 1, "dob": 1, _id: 0 }).sort({ "dob": -1 })

```
> db.details.find({}, { name: 1, "dob": 1, _id: 0 }).sort({ "dob": -1 })
< {
    name: 'Anand Mishra',
    dob: 2008-12-04T00:00:00.000Z
  }
  {
    name: 'Ramya Gowda',
    dob: 2008-08-16T00:00:00.000Z
  }
  {
    name: 'Priya Sawant',
    dob: 2006-07-30T00:00:00.000Z
  }
  {
    name: 'Mahadevaswamy',
    dob: 2004-05-24T00:00:00.000Z
  }
  {
    name: 'Zoya Akram',
    dob: 2002-11-14T00:00:00.000Z
  }
```

7. Simple Fetch Involving Nested Documents And Sort City Desc

>db.details.find({}, { name: 1,"personal_details.City": 1,   _id: 0 }).sort({"personal_details.City": -1 })

```
> db.details.find({}, { name: 1,"personal_details.City": 1,   _id: 0 }).sort({"personal_details.City": -1 })
< {
    name: 'Priya Sawant',
    personal_details: {
      City: 'Mumbai'
    }
  }
  {
    name: 'Anand Mishra',
    personal_details: {
      City: 'Lucknow'
    }
  }
  {
    name: 'Zoya Akram',
    personal_details: {
      City: 'Hyderabad'
    }
  }
```

```
  {
    name: 'Mahadevaswamy',
    personal_details: {
      City: 'Bangalore'
    }
  }
  {
    name: 'Ramya Gowda',
    personal_details: {
      City: 'Bangalore'
    }
  }
```

8. Simple Fetch Involving Nested Documents and Use Limit Operator

>db.details.find({}, { name: 1, "personal_details": 1, _id: 0 }).limit(3)

```
< {
    name: 'Anand Mishra',
    personal_details: {
      Father_name: 'Deepak Mishra',
      phone_no: 8895321456,
      age: 23,
      gender: 'Male',
      City: 'Lucknow'
    }
  }
  {
    name: 'Zoya Akram',
    personal_details: {
      Father_name: 'Ahmed Javed',
      phone_no: 9874563698,
      age: 20,
      gender: 'Female',
      City: 'Hyderabad'
    }
  }
  {
    name: 'Mahadevaswamy',
    personal_details: {
      Father_name: 'Nanjudaswamy',
      phone_no: 7845123698,
      age: 24,
      gender: 'Male',
      City: 'Bangalore'
    }
```

9. Demonstrate How To Use Skip Operator In MongoDB

>db.details.find({}, { name: 1, "personal_details": 1, _id: 0 }).skip(2)

```
< {
    name: 'Mahadevaswamy',
    personal_details: {
      Father_name: 'Nanjudaswamy',
      phone_no: 7845123698,
      age: 24,
      gender: 'Male',
      City: 'Bangalore'
    }
  }
  {
    name: 'Priya Sawant',
    personal_details: {
      Father_name: 'Ashok Sawant',
      phone_no: 9997845123,
      age: 25,
      gender: 'Female',
      City: 'Mumbai'
    }
  }
  {
    name: 'Ramya Gowda',
    personal_details: {
      Father_name: 'Arjun Gowda',
      phone_no: 6312547896,
      age: 22,
      gender: 'Female',
      City: 'Bangalore'
    }
```

10. Demonstrate How to Use In Operator And Sort By Dob Asc

>db.details.find(

{ "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },

{ name: 1,"personal_details.City":1, "dob": 1, _id: 0 }

).sort({ "dob": 1 })

```
> db.details.find(
    { "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },
    { name: 1,"personal_details.City":1, "dob": 1, _id: 0 }
).sort({ "dob": 1 })

< {
    name: 'Zoya Akram',
    dob: 2002-11-14T00:00:00.000Z,
    personal_details: {
      City: 'Hyderabad'
    }
  }
  {
    name: 'Priya Sawant',
    dob: 2006-07-30T00:00:00.000Z,
    personal_details: {
      City: 'Mumbai'
    }
  }
  {
    name: 'Anand Mishra',
    dob: 2008-12-04T00:00:00.000Z,
    personal_details: {
      City: 'Lucknow'
    }
  }
```

11. Demonstrate How to Use In Operator And Sort By Age Desc

>db.details.find(

{ "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },

{ name: 1,"personal_details.City":1, "age": 1, _id: 0 }

).sort({ "age": -1 })

```
> db.details.find(
    { "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },
    { name: 1,"personal_details.City":1, "age": 1, _id: 0 }
).sort({ "age": -1 })

< {
    name: 'Anand Mishra',
    personal_details: {
      City: 'Lucknow'
    }
  }
  {
    name: 'Zoya Akram',
    personal_details: {
      City: 'Hyderabad'
    }
  }
  {
    name: 'Priya Sawant',
    personal_details: {
      City: 'Mumbai'
    }
  }
```

12. Demonstrate How to Use In Operator And Sort By Sort Batch_Year Desc

>db.details.find(

  { "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },

  { name: 1,"personal_details.City":1, "batch_year": 1, _id: 0 }

).sort({ "batch_year": -1 })

```
> db.details.find(
    { "personal_details.City": { $in: ["Lucknow", "Mumbai", "Hyderabad"] } },
    { name: 1,"personal_details.City":1, "batch_year": 1, _id: 0 }
  ).sort({ "batch_year": -1 })
< {
    name: 'Zoya Akram',
    batch_year: 2020,
    personal_details: {
      City: 'Hyderabad'
    }
  }
  {
    name: 'Anand Mishra',
    batch_year: 2018,
    personal_details: {
      City: 'Lucknow'
    }
  }
  {
    name: 'Priya Sawant',
    batch_year: 2017,
    personal_details: {
      City: 'Mumbai'
    }
  }
```