

## DBMSL Assignment No 9

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### Output

```
test> show dbs
admin    40.00 KiB
config   12.00 KiB
local    40.00 KiB

test> use Articles
switched to db Articles
Articles> db.createCollection('articles')
{ ok: 1 }

Articles> show dbs
Articles  8.00 KiB
admin     40.00 KiB
config    60.00 KiB
local     40.00 KiB
```

#### 1.Insert 5 Data:

```
Articles>
db.articles.insertOne({Title:'Entrepreneur',Content:'Businesses',Author:'Bhavik Sarkhedi',Author_age:20,Dop:new Date('2023-10-08'),Category:'FreeLancing',Comments:[{Name:'XYZ',Remarks:'Good'},{Name:'ABC',Remarks:'Can be Better'}]})
{
  acknowledged: true,
  insertedId: ObjectId("6527c74865659a592e3e2814")
}
```

```
Articles> db.articles.insertMany([
  {Title:'Novelist',Content:'English Literature',Author:'Chetan Bhagat',Author_age:25,Dop:new Date('2023-02-10'),Category:'FreeLancing',Comments:[{Name:'LMN',Remarks:'Good'},{Name:'PQR',Remarks:'Can be Better'}]},
  {Title:'Story Books',Content:'Horror',Author:'A.B.Sharma',Author_age:30,Dop:new Date('2023-3-15'),Category:'FreeLancing',Comments:[{Name:'AAA',Remarks:'Good'},{Name:'BBB',Remarks:'Can be Better'}]}
])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("6527c9dc65659a592e3e2815"),
    '1': ObjectId("6527c9dc65659a592e3e2816")
  }
}
```

```
Articles> db.articles.insertMany([
  {Title:'Novelist',Content:'Indian Literature',Author:'Anita Desai',Author_age:16,Dop:new Date('2023-05-22'),Category:'FreeLancing',Comments:[{Name:'QQQ',Remarks:'Good'},{Name:'PPP',Remarks:'Can be Better'}]},
  {Title:'The God of Small Things',Content:'ScreenPlays',Author:'Arundhati Roy',Author_age:16,Dop:new Date('2022-4-20'),Category:'FreeLancing',Comments:[{Name:'DDD',Remarks:'Good'},{Name:'CCC',Remarks:'Can be Better'}]}
])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("6527cae665659a592e3e2817"),
    '1': ObjectId("6527cae665659a592e3e2818")
  }
}
```

```
}  
}
```

## 1.2 Display all records:

```
Articles> db.articles.find().pretty()  
[  
  {  
    _id: ObjectId("6527c74865659a592e3e2814"),  
    Title: 'Entrepreneur',  
    Content: 'Businesses',  
    Author: 'Bhavik Sarkhedi',  
    Author_age: 20,  
    Dop: ISODate("2023-10-08T00:00:00.000Z"),  
    Category: 'FreeLancing',  
    Comments: [  
      { Name: 'XYZ', Remarks: 'Good' },  
      { Name: 'ABC', Remarks: 'Can be Better' }  
    ],  
  },  
  {  
    _id: ObjectId("6527c9dc65659a592e3e2815"),  
    Title: 'Novelist',  
    Content: 'English Literature',  
    Author: 'Chetan Bhagat',  
    Author_age: 25,  
    Dop: ISODate("2023-02-10T00:00:00.000Z"),  
    Category: 'FreeLancing',  
    Comments: [  
      { Name: 'LMN', Remarks: 'Good' },  
      { Name: 'PQR', Remarks: 'Can be Better' }  
    ],  
  },  
  {  
    _id: ObjectId("6527c9dc65659a592e3e2816"),  
    Title: 'Story Books',  
    Content: 'Horror',  
    Author: 'A.B.Sharma',  
    Author_age: 30,  
    Dop: ISODate("2023-03-14T18:30:00.000Z"),  
    Category: 'FreeLancing',  
    Comments: [  
      { Name: 'AAA', Remarks: 'Good' },  
      { Name: 'BBB', Remarks: 'Can be Better' }  
    ],  
  },  
  {  
    _id: ObjectId("6527cae665659a592e3e2817"),  
    Title: 'Novelist',  
    Content: 'Indian Literature',  
    Author: 'Anita Desai',  
    Author_age: 16,  
    Dop: ISODate("2023-05-22T00:00:00.000Z"),  
    Category: 'FreeLancing',  
    Comments: [  
      { Name: 'QQQ', Remarks: 'Good' },  
      { Name: 'PPP', Remarks: 'Can be Better' }  
    ],  
  },  
  {  
    _id: ObjectId("6527cae665659a592e3e2818"),  
    Title: 'The God of Small Things',  
    Content: 'ScreenPlays',  
    Author: 'Arundhati Roy',
```

```

        Author_age: 16,
        Dop: ISODate("2022-04-19T18:30:00.000Z"),
        Category: 'FreeLancing',
        Comments: [
            { Name: 'DDD', Remarks: 'Good' },
            { Name: 'CCC', Remarks: 'Can be Better' }
        ]
    }
]

```

## 2.Display first document found in db:

```

Articles> db.articles.find().limit(1)
[
  {
    _id: ObjectId("6527c74865659a592e3e2814"),
    Title: 'Entrepreneur',
    Content: 'Businesses',
    Author: 'Bhavik Sarkhedi',
    Author_age: 20,
    Dop: ISODate("2023-10-08T00:00:00.000Z"),
    Category: 'FreeLancing',
    Comments: [
      { Name: 'XYZ', Remarks: 'Good' },
      { Name: 'ABC', Remarks: 'Can be Better' }
    ]
  }
]

```

## 3.Display first document belonging to a certain author says "Sharma":

```

Articles> db.articles.find({Author:/Sharma/})
[
  {
    _id: ObjectId("6527c9dc65659a592e3e2816"),
    Title: 'Story Books',
    Content: 'Horror',
    Author: 'A.B.Sharma',
    Author_age: 30,
    Dop: ISODate("2023-03-14T18:30:00.000Z"),
    Category: 'FreeLancing',
    Comments: [
      { Name: 'AAA', Remarks: 'Good' },
      { Name: 'BBB', Remarks: 'Can be Better' }
    ]
  }
]

```

## 4.Modify the comment by certain person on a certain article:

```

Articles>
db.articles.update({Title:'Entrepreneur','Comments.Name':'ABC'},{$set: {'Comments.$.Remarks':'Excellent'}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}

```

```

Articles> db.articles.find().limit(1)
[
  {
    _id: ObjectId("6527c74865659a592e3e2814"),
    Title: 'Entrepreneur',
    Content: 'Businesses',
    Author: 'Bhavik Sarkhedi',
    Author_age: 20,
    Dop: ISODate("2023-10-08T00:00:00.000Z"),
    Category: 'FreeLancing',
    Comments: [
      { Name: 'XYZ', Remarks: 'Good' },
      { Name: 'ABC', Remarks: 'Excellent' }
    ]
  }
]

```

### 5.1 Insert records with save method with object \_id:

```

Articles>
db.articles.save({_id:10,Title:'DBMS',Content:'MongoDB',Author:'Prof.M.S.Agarwal',Author_age:30,Dop:new Date('2023-10-10'),Category:'Database',Comments:[{Name:'HHH',Remarks:'Better'},{Name:'JJJ',Remarks:'Excellent'}]});

> db.articles.find({Title:"DBMS"}).pretty()
{
  "_id" : 10,
  "Title" : "DBMS",
  "Content" : "MongoDB",
  "Author" : "Prof.M.S.Agarwal",
  "Author_age" : 30,
  "Dop" : ISODate("2023-10-10T00:00:00Z"),
  "Category" : "Database",
  "Comments" : [
    {
      "Name" : "HHH",
      "Remarks" : "Better"
    },
    {
      "Name" : "JJJ",
      "Remarks" : "Excellent"
    },
    {
      "Name" : "FFF",
      "Remarks" : "Nice"
    }
  ]
}

```

### 5.2 Insert records with save method without object \_id:

```

>
db.articles.save({Title:'TOC',Content:'DFA',Author:'Prof.R.R.Bathe',Author_age:30,Dop:new Date('2023-10-20'),Category:'Automata',Comments:[{Name:'EEE',Remarks:'Better'},{Name:'SSS',Remarks:'Excellent'}]});
WriteResult({ "nInserted" : 1 })

> db.articles.find({Title:"TOC"}).pretty()
{
  "_id" : ObjectId("652cd16e3110241d64b6456d"),
  "Title" : "TOC",
  "Content" : "DFA",

```

```

        "Author" : "Prof.R.R.Bathe",
        "Author_age" : 30,
        "Dop" : ISODate("2023-10-20T00:00:00Z"),
        "Category" : "Automata",
        "Comments" : [
            {
                "Name" : "EEE",
                "Remarks" : "Better"
            },
            {
                "Name" : "SSS",
                "Remarks" : "Excellent"
            }
        ]
    }
}

```

## 6.Update a Collection with save method:

```

Articles >
db.articles.save({_id:10,Title:'DBMS',Content:'MySQL',Author:'Prof.M.S.Agarwal',
,Author_age:25,Dop:new Date("2023-10-
16"),Category:'Database',Comments:[{Name:'HHH',Remarks:'Good'},
{Name:'JJJ',Remarks:'Nice'}]})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

> db.articles.find({Title:'DBMS'}).pretty()
{
  "_id" : 10,
  "Title" : "DBMS",
  "Content" : "MySQL",
  "Author" : "Prof.M.S.Agarwal",
  "Author_age" : 25,
  "Dop" : ISODate("2023-10-16T00:00:00Z"),
  "Category" : "Database",
  "Comments" : [
    {
      "Name" : "HHH",
      "Remarks" : "Good"
    },
    {
      "Name" : "JJJ",
      "Remarks" : "Nice"
    }
  ]
}

```

## 7.Add one more comment for a particular Title:

```

>
db.articles.update({Title:'TOC'},{$push:{Comments:{Name:'FFF',Remarks:'Nice'}}}
)
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

> db.articles.find({Title:'TOC'}).pretty()
{
  "_id" : ObjectId("652cd16e3110241d64b6456d"),
  "Title" : "TOC",
  "Content" : "DFA",
  "Author" : "Prof.R.R.Bathe",
  "Author_age" : 30,
  "Dop" : ISODate("2023-10-20T00:00:00Z"),
  "Category" : "Automata",

```

```

    "Comments" : [
      {
        "Name" : "EEE",
        "Remarks" : "Better"
      },
      {
        "Name" : "SSS",
        "Remarks" : "Excellent"
      },
      {
        "Name" : "FFF",
        "Remarks" : "Nice"
      }
    ]
  }
}

```

#### 8.Delete the documents whose author age<18:

```

> db.articles.deleteMany({Author_age:{$lt:18}})
{ "acknowledged" : true, "deletedCount" : 2 }

> db.articles.find().pretty()
{
  "_id" : ObjectId("6528cd46a0571873b9d71186"),
  "Title" : "Entrepreneur",
  "Content" : "Businesses",
  "Author" : "Bhavik Sarkhedi",
  "Author_age" : 20,
  "Dop" : ISODate("2023-10-08T00:00:00Z"),
  "Category" : "FreeLancing",
  "Comments" : [
    {
      "Name" : "XYZ",
      "Remarks" : "Good"
    },
    {
      "Name" : "ABC",
      "Remarks" : "Excellent"
    }
  ]
}
{
  "_id" : ObjectId("6528cee6a0571873b9d71187"),
  "Title" : "Novelist",
  "Content" : "English Literature",
  "Author" : "Chetan Bhagat",
  "Author_age" : 25,
  "Dop" : ISODate("2023-02-10T00:00:00Z"),
  "Category" : "FreeLancing",
  "Comments" : [
    {
      "Name" : "LMN",
      "Remarks" : "Good"
    },
    {
      "Name" : "PQR",
      "Remarks" : "Can be Better"
    }
  ]
}
{
  "_id" : ObjectId("6528cee6a0571873b9d71188"),
  "Title" : "Story Books",

```

```

        "Content" : "Horror",
        "Author" : "A.B.Sharma",
        "Author_age" : 30,
        "Dop" : ISODate("2023-03-15T00:00:00Z"),
        "Category" : "FreeLancing",
        "Comments" : [
            {
                "Name" : "AAA",
                "Remarks" : "Good"
            },
            {
                "Name" : "BBB",
                "Remarks" : "Can be Better"
            }
        ]
    }
}

{
    "_id" : 10,
    "Title" : "DBMS",
    "Content" : "MySql",
    "Author" : "Prof.M.S.Agarwal",
    "Author_age" : 25,
    "Dop" : ISODate("2023-10-16T00:00:00Z"),
    "Category" : "Database",
    "Comments" : [
        {
            "Name" : "HHH",
            "Remarks" : "Good"
        },
        {
            "Name" : "JJJ",
            "Remarks" : "Nice"
        }
    ]
}

{
    "_id" : ObjectId("652cd16e3110241d64b6456d"),
    "Title" : "TOC",
    "Content" : "DFA",
    "Author" : "Prof.R.R.Bathe",
    "Author_age" : 30,
    "Dop" : ISODate("2023-10-20T00:00:00Z"),
    "Category" : "Automata",
    "Comments" : [
        {
            "Name" : "EEE",
            "Remarks" : "Better"
        },
        {
            "Name" : "SSS",
            "Remarks" : "Excellent"
        },
        {
            "Name" : "FFF",
            "Remarks" : "Nice"
        }
    ]
}

```

**9.Remove all the documents from the collection:**

```
> db.articles.deleteMany({})  
{ "acknowledged" : true, "deletedCount" : 5 }  
  
> db.articles.find().pretty()
```

**10.Delete article collection:**

```
> db.articles.drop()  
true  
  
> db.getCollectionNames()  
[ ]
```