Output

```
> use khushildb
switched to db khushildb
> db.createCollection("Student");
{ "ok" : 1 }
> db.Student.insert({_id: 1, StudName: "Khushil Sindhwad", Grade: 9, Hobbies:
"InternetSurfing"});
WriteResult({ "nInserted" : 1 })
> db.Student.find();
{ "_id" : 1, "StudName" : "Khushil Sindhwad", "Grade" : 9, "Hobbies" : "InternetSurfing" }
> db.Student.find().pretty();
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}

> db.Student.update({_id:3, StudName: "AryanDavid", Grade: 8},{$set: {Hobbies:
"Skating"}},{upsert: true});
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 3 })

> db.Student.find()
{ "_id" : 1, "StudName" : "Khushil Sindhwad", "Grade" : 9, "Hobbies" : "InternetSurfing" }
{ "_id" : 3, "Grade" : 8, "StudName" : "AryanDavid", "Hobbies" : "Skating" }
> db.Student.find().pretty()
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
> db.Student.find({},{StudName: 1, Grade: 1,_id: 0});
{ "StudName" : "Khushil Sindhwad", "Grade" : 9 }
{ "Grade" : 8, "StudName" : "AryanDavid" }
> db.Student.find({Grade: {$eq: 8}}).pretty()
```

```
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
> db.Student.find({Hobbies: {$in: ["Chess","Skating"]}}).pretty()
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
> db.Student.insert({_id: 2, StudName: "Mohandas", Grade: 10, Hobbies: "Satyagraha"});
WriteResult({ "nInserted" : 1 })
> db.Student.find().pretty()
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
> db.Student.find({StudName: /^M/}).pretty()
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
> db.Student.find({StudName: /e/}).pretty()
> db.Student.count()
3
```

```
> db.Student.find().sort({StudName: -1}).pretty();
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
> db.Student.save({StudName: "Vamsi", Grade: 8});
WriteResult({ "nInserted" : 1 })
> db.Student.update({_id:2},{$set:{Location: "Network"}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find().pretty();
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha",
        "Location" : "Network"
}
{
```

```
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
> db.Student.update({_id:2},{$unset:{Location: "Network"}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find().pretty();
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
}
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
> db.Student.find({_id:1},{StudName:1,Grade:1,_id:0});
{ "StudName" : "Khushil Sindhwad", "Grade" : 9 }
> db.Student.find({Grade:{$ne:"8"}}).pretty();
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating"
```

```
}
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{

        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
> db.Student.find({Grade:{$ne:8}}).pretty();
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{

        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
> db.Student.insert({_id: 4, StudName: "Suresh", Grade: 9, Hobbies: "Games"});
WriteResult({ "nInserted" : 1 })
> db.Student.find({StudName:/s$/}).pretty();
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
> db.Students.update({_id:3},{$set:{Location:null}});
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
> db.Student.update({_id:3},{$set:{Location:null}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Student.find()
{ "_id" : 1, "StudName" : "Khushil Sindhwad", "Grade" : 9, "Hobbies" : "InternetSurfing" }
{ "_id" : 3, "Grade" : 8, "StudName" : "AryanDavid", "Hobbies" : "Skating", "Location" : null }
{ "_id" : 2, "StudName" : "Mohandas", "Grade" : 10, "Hobbies" : "Satyagraha" }
{ "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"), "StudName" : "Vamsi", "Grade" : 8 }
{ "_id" : 4, "StudName" : "Suresh", "Grade" : 9, "Hobbies" : "Games" }
```

```
> db.Student.count();
5
> db.Student.count({Grade:"8"});
0
> db.Student.count({Grade:8});
2
> db.Student.find({Grade:8}).limit(3).pretty();
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating",
        "Location" : null
}
{
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
> db.Students.find().sort({StudName:1}).pretty();
> db.Student.find().sort({StudName:1}).pretty();
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating",
        "Location" : null
}
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{ "_id" : 4, "StudName" : "Suresh", "Grade" : 9, "Hobbies" : "Games" }
{
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
```

```
        "StudName" : "Vamsi",
        "Grade" : 8
}
> db.Student.find().sort({StudName:-1}).pretty();
{
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
{ "_id" : 4, "StudName" : "Suresh", "Grade" : 9, "Hobbies" : "Games" }
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{
        "_id" : 1,
        "StudName" : "Khushil Sindhwad",
        "Grade" : 9,
        "Hobbies" : "InternetSurfing"
}
{
        "_id" : 3,
        "Grade" : 8,
        "StudName" : "AryanDavid",
        "Hobbies" : "Skating",
        "Location" : null
}
> db.Student.find().skip(2).pretty();
{
        "_id" : 2,
        "StudName" : "Mohandas",
        "Grade" : 10,
        "Hobbies" : "Satyagraha"
}
{
        "_id" : ObjectId("6253f0c24cacc6d6c2d43d70"),
        "StudName" : "Vamsi",
        "Grade" : 8
}
{ "_id" : 4, "StudName" : "Suresh", "Grade" : 9, "Hobbies" : "Games" }
> db.createCollection("food");
{ "ok" : 1 }
```

```
> db.food.insert({_id:1, fruits:["grapes","mango","apple"]})
WriteResult({ "nInserted" : 1 })
> db.food.insert( { _id:2, fruits:["grapes","mango","cherry"] } )
WriteResult({ "nInserted" : 1 })
> db.food.insert( { _id:3, fruits:["banana","mango"] } )
WriteResult({ "nInserted" : 1 })
> db.food.find ( {fruits: ["grapes","mango","apple"] } ). pretty()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
> db.food.find({fruits:["grapes","mango","apple"]}).pretty()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
> db.food.find({"fruits.1":"grapes"})

> db.food.find()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
{ "_id" : 3, "fruits" : [ "banana", "mango" ] }
> db.food.find({"fruits.0":"grapes"})
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
> db.food.find({"fruits":{$size:2}})
{ "_id" : 3, "fruits" : [ "banana", "mango" ] }
> db.food.find({_id:1},{"fruits":{$slice:2}})
{ "_id" : 1, "fruits" : [ "grapes", "mango" ] }
> db.food.find({fruits:{$all:["mango","grapes"]}})
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
> db.food.update({_id:3},{$set:{"fruits.1":"apple"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

> db.food.find()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
{ "_id" : 3, "fruits" : [ "banana", "apple" ] }
> db.food.update({_id:2},{$push:{price:{grapes:80,mango:200,cherry:100}}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.food.find()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ], "price" : [ { "grapes" : 80, "mango" : 200,
"cherry" : 100 } ] }
{ "_id" : 3, "fruits" : [ "banana", "apple" ] }
> db.food.find().pretty()
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{
        "_id" : 2,
```

```
        "fruits" : [
                "grapes",
                "mango",
                "cherry"
        ],
        "price" : [
                {
                        "grapes" : 80,
                        "mango" : 200,
                        "cherry" : 100
                }
        ]
}
{ "_id" : 3, "fruits" : [ "banana", "apple" ] }
> exit
bye
```