```
>
> db.users.updateOne({_id: ObjectId("5b9f707ead7ae74ebe5bc6c7")}, {$set: {hobbies: [{title: "Sports",
frequency: 5}, {title: "Cooking", frequency: 3}, {title: "Hiking", frequency: 1}]}})
```

```
}
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ]
}
>
```

```
>
> db.users.updateMany({"hobbies.title": "Sports"}, {$set: {isSporty: true}})
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 3 }
>
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ],
        "isSporty" : true
}
>
```

```
>
> db.users.updateOne({_id: ObjectId("5b9f707ead7ae74ebe5bc6c7")}, {$set: {age: 40, phone: 483924792}})

{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ],
        "isSporty" : true,
        "age" : 40,
        "phone" : 483924792
}
>
```

```
>
> db.users.updateOne({name: "Manuel"}, {$inc: {age: 2}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
{
        "_id" : ObjectId("5b9f652dc62d13aa2e81c29e"),
        "name" : "Manuel",
        "hobbies" : [
                {
                        "title" : "Cooking",
                        "frequency" : 5
                },
                {
                        "title" : "Cars",
                        "frequency" : 2
                }
        ],
        "phone" : "012177972",
        "age" : 32
}
```

```
>
> db.users.updateOne({name: "Manuel"}, {$inc: {age: -1}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
> db.users.find().pretty()
```

```
{
        "_id" : ObjectId("5b9f652dc62d13aa2e81c29e"),
        "name" : "Manuel",
        "hobbies" : [
                {
                        "title" : "Cooking",
                        "frequency" : 5
                },
                {
                        "title" : "Cars",
                        "frequency" : 2
                }
        ],
        "phone" : "012177972",
        "age" : 31
}
```

```
>
> db.users.updateOne({name: "Manuel"}, {$inc: {age: 1}, $set: {isSporty: false}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
}
{
        "_id" : ObjectId("5b9f652dc62d13aa2e81c29e"),
        "name" : "Manuel",
        "hobbies" : [
                {
                        "title" : "Cooking",
                        "frequency" : 5
                },
                {
                        "title" : "Cars",
                        "frequency" : 2
                }
        ],
        "phone" : "012177972",
        "age" : 32,
        "isSporty" : false
}
{
```

```
> db.users.updateOne({name: "Chris"}, {$max: {age: 38}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ],
        "isSporty" : true,
        "age" : 38,
        "phone" : 483924792
}
>
```

```
>
> db.users.updateOne({name: "Chris"}, {$mul: {age: 1.1}})
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ],
        "isSporty" : true,
        "age" : 41.800000000000004,
        "phone" : 483924792
}
>
```

```
>
> db.users.updateMany({isSporty: true}, {$unset: {phone: ""}})
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 3 }
> db.users.find().pretty()
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5
                },
                {
                        "title" : "Cooking",
                        "frequency" : 3
                },
                {
                        "title" : "Hiking",
                        "frequency" : 1
                }
        ],
        "isSporty" : true,
        "age" : 41.800000000000004
}
>
```

```
>
> db.users.updateMany({}, {$rename: {age: "totalAge"}})
{ "acknowledged" : true, "matchedCount" : 4, "modifiedCount" : 3 }
>
```

```
                                      "frequency" : 3
                    }
          ],
          "isSporty" : true,
          "totalAge" : null
}
{

          "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
          "name" : "Chris",
          "hobbies" : [
                    {
                              "title" : "Sports",
                              "frequency" : 5
                    },
                    {
                              "title" : "Cooking",
                              "frequency" : 3
                    },
                    {
                              "title" : "Hiking",
                              "frequency" : 1
                    }
          ],
          "isSporty" : true,
          "totalAge" : 41.800000000000004
}
>
```

```
> db.users.updateOne({name: "Maria"}, {$set: {age: 29, hobbies: [{title: "Good food", frequency: 3}],
isSporty: true}}, {upsert: true})
{
        "acknowledged" : true,
        "matchedCount" : 0,
        "modifiedCount" : 0,
        "upsertedId" : ObjectId("5b9fb59d51dfa62353d131f4")
}
>
```

```
{
        "_id" : ObjectId("5b9fb59d51dfa62353d131f4"),
        "name" : "Maria",
        "age" : 29,
        "hobbies" : [
                {
                        "title" : "Good food",
                        "frequency" : 3
                }
        ],
        "isSporty" : true
}
>
```

```
>
> db.users.find({$and: [{"hobbies.title": "Sports"}, {"hobbies.frequency": {$gte: 3}}]}).pretty()
```

```
>
> db.users.find({hobbies: {$elemMatch: {title: "Sports", frequency: {$gte: 3}}}}).pretty()
```

```
> db.users.updateMany({hobbies: {$elemMatch: {title: "Sports", frequency: {$gte: 3}}}}, {$set: {"hobbi
es.$.highFrequency": true}})
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
>
```

```json
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 5,
                        "highFrequency" : true
                },
                {

                        "title" : "Cooking",
                        "frequency" : 3

                },
                {

                        "title" : "Hiking",
                        "frequency" : 1

                }
        ],
        "isSporty" : true,
        "totalAge" : 41.800000000000004

}
```

```
> db.users.updateMany({totalAge: {$gt: 30}}, {$inc: {"hobbies.$[].frequency": -1}})
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
>
```

```json
{
    "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
    "name" : "Chris",
    "hobbies" : [
        {
            "title" : "Sports",
            "frequency" : 4,
            "highFrequency" : true
        },
        {
            "title" : "Cooking",
            "frequency" : 2
        },
        {
            "title" : "Hiking",
            "frequency" : 0
        }
    ],
    "isSporty" : true,
    "totalAge" : 41.800000000000004
}
```

```
> db.users.updateMany({"hobbies.frequency": {$gt: 2}}, {$set: {"hobbies.$[el].goodFrequency": true}}
{arrayFilters: [{"el.frequency": {$gt: 2}}]})
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 5 }
> db.users.find().pretty()
```

```
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 4,
                        "highFrequency" : true,
                        "goodFrequency" : true
                },
                {

                        "title" : "Cooking",
                        "frequency" : 2
                },
                {

                        "title" : "Hiking",
                        "frequency" : 0
                }
        ],
        "isSporty" : true,
        "totalAge" : 41.800000000000004
}
```

```
>
> db.users.updateOne({name: "Maria"}, {$push: {hobbies: {title: "Sports", frequency: 2}}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
{
        "_id" : ObjectId("5b9fb59d51dfa62353d131f4"),
        "name" : "Maria",
        "age" : 29,
        "hobbies" : [
                {
                        "title" : "Good food",
                        "frequency" : 3,
                        "goodFrequency" : true
                },
                {
                        "title" : "Sports",
                        "frequency" : 2
                }
        ],
        "isSporty" : true
}
> c
```

```
>
> db.users.updateOne({name: "Maria"}, {$push: {hobbies: {$each: [{title: "Good Wine", frequency: 1},
title: "Hiking", frequency: 2}], $sort: {frequency: -1}}}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
{
        "_id" : ObjectId("5b9fb59d51dfa62353d131f4"),
        "name" : "Maria",
        "age" : 29,
        "hobbies" : [
                {
                        "title" : "Good food",
                        "frequency" : 3,
                        "goodFrequency" : true
                },
                {
                        "title" : "Sports",
                        "frequency" : 2
                },
                {
                        "title" : "Hiking",
                        "frequency" : 2
                },
                {
                        "title" : "Good Wine",
                        "frequency" : 1
                }
        ],
        "isSporty" : true
}
>
```

```
>
> db.users.updateOne({name: "Maria"}, {$pull: {hobbies: {title: "Good Wine"}}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
{
        "_id" : ObjectId("5b9fb59d51dfa62353d131f4"),
        "name" : "Maria",
        "age" : 29,
        "hobbies" : [
                {
                        "title" : "Good food",
                        "frequency" : 3,
                        "goodFrequency" : true
                },
                {
                        "title" : "Sports",
                        "frequency" : 2
                }
        ],
        "isSporty" : true
}
>
```

```
>
> db.users.updateOne({name: "Chris"}, {$pop: {hobbies: 1}})
```

```json
{
        "_id" : ObjectId("5b9f707ead7ae74ebe5bc6c7"),
        "name" : "Chris",
        "hobbies" : [
                {
                        "title" : "Sports",
                        "frequency" : 4,
                        "highFrequency" : true,
                        "goodFrequency" : true
                },
                {

                        "title" : "Cooking",
                        "frequency" : 2

                }
        ],
        "isSporty" : true,
        "totalAge" : 41.800000000000004
}
```

```
>
> db.users.updateOne({name: "Maria"}, {$addToSet: {hobbies: {title: "Hiking", frequency: 2}}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>
```

```
{
        "_id" : ObjectId("5b9fb59d51dfa62353d131f4"),
        "name" : "Maria",
        "age" : 29,
        "hobbies" : [
                {
                        "title" : "Good food",
                        "frequency" : 3,
                        "goodFrequency" : true
                },
                {
                        "title" : "Sports",
                        "frequency" : 2
                },
                {
                        "title" : "Hiking",
                        "frequency" : 2
                }
        ],
        "isSporty" : true
}
>
```