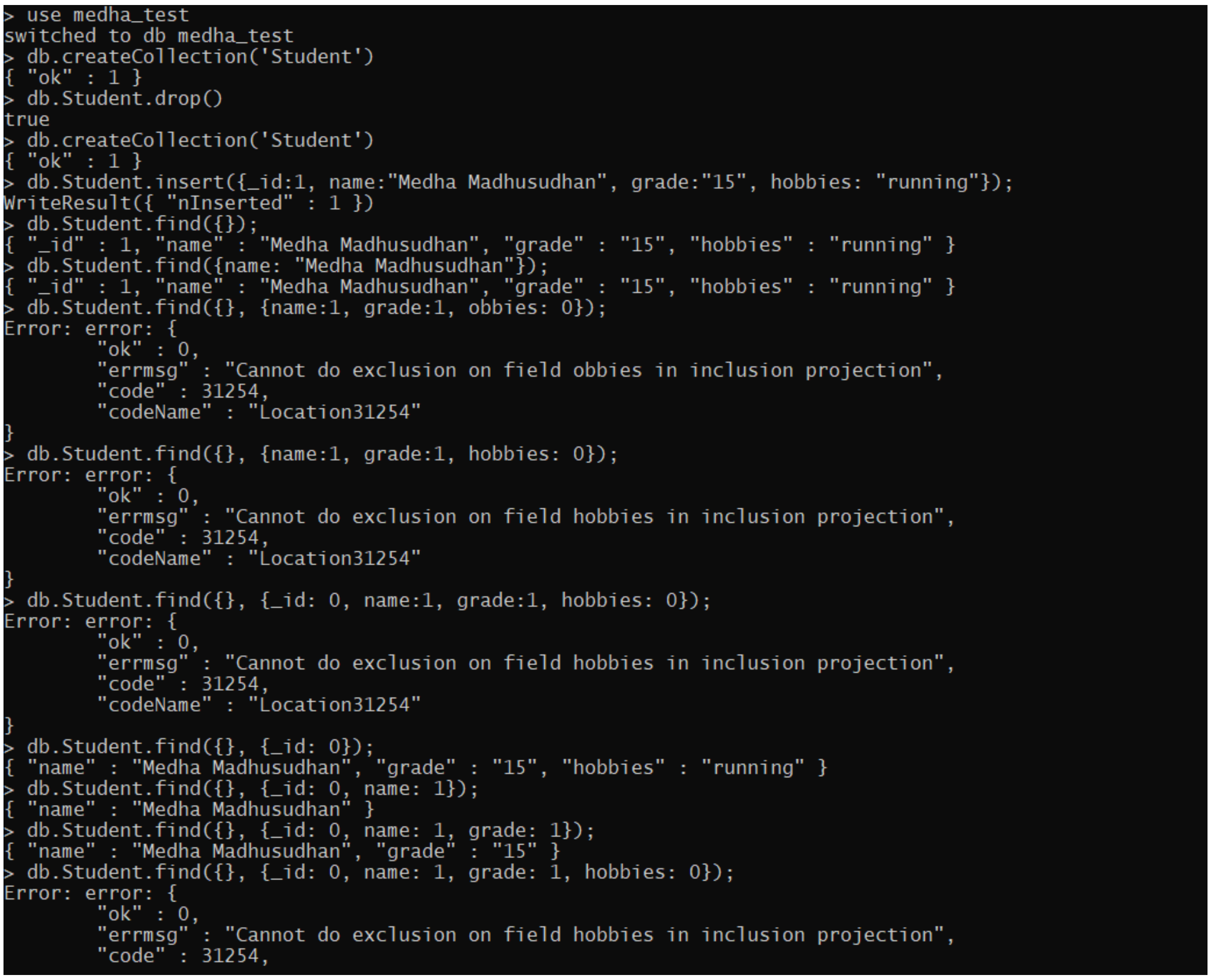
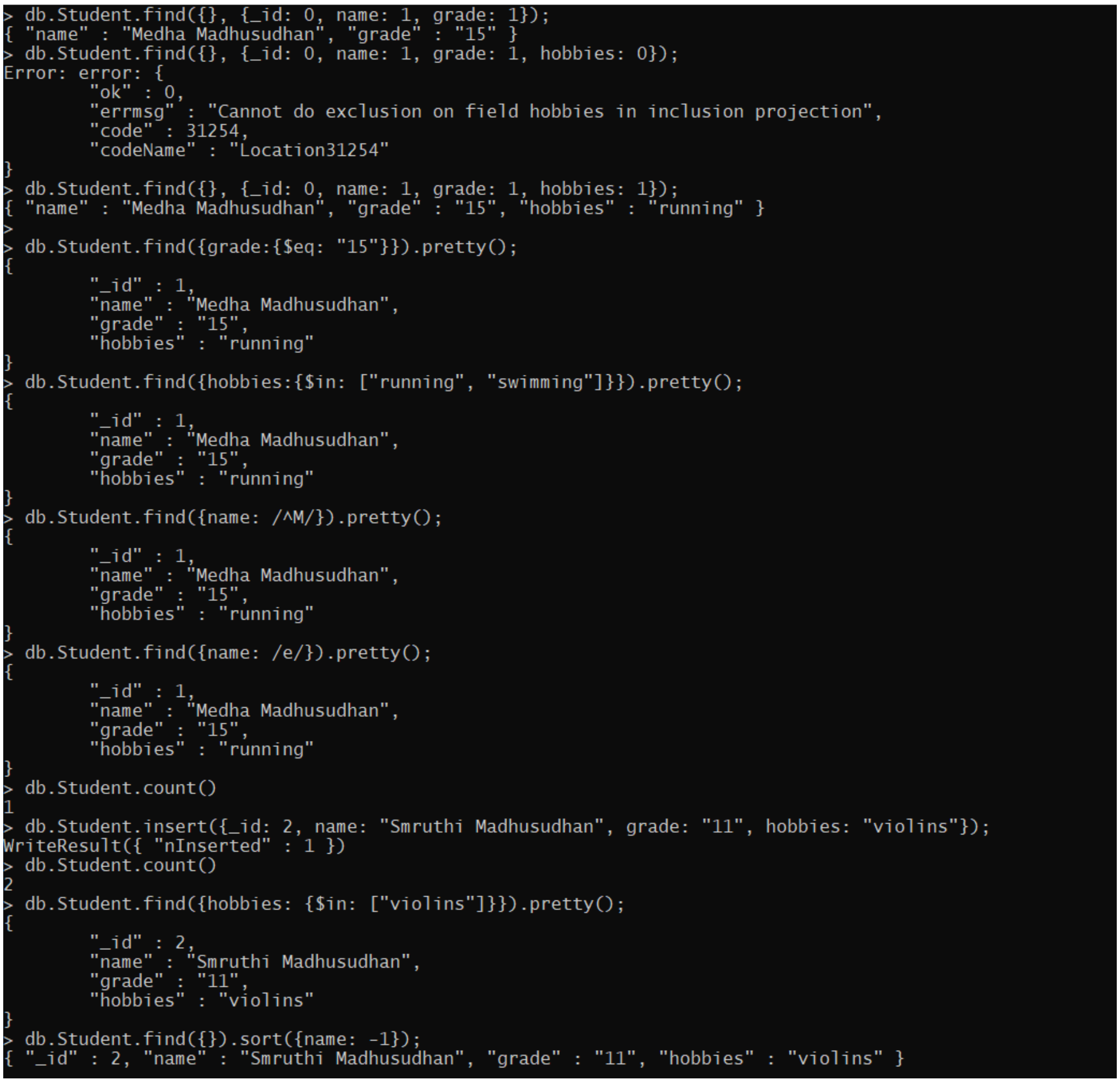
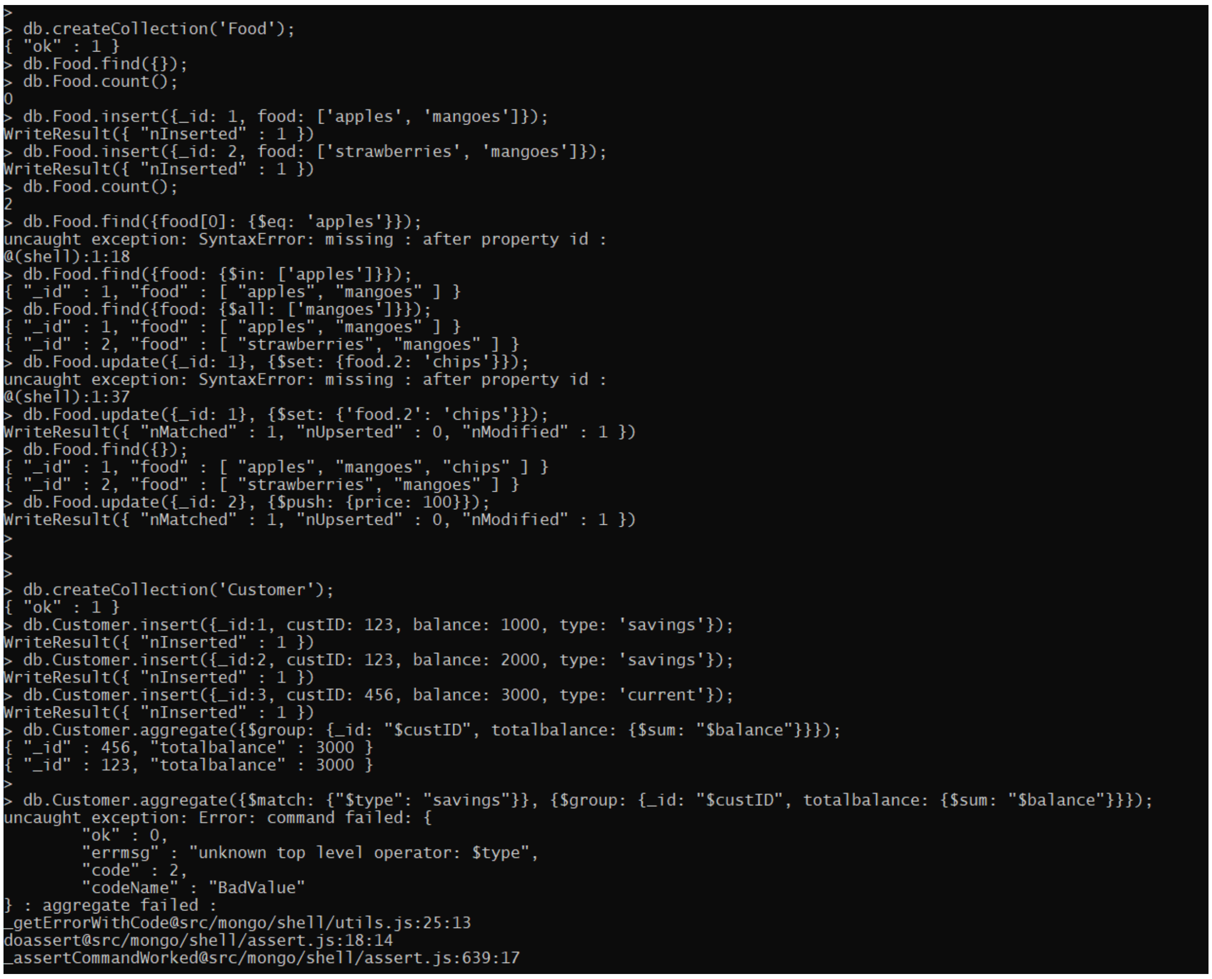


```
> use medha_test
switched to db medha_test
> db.createCollection('Student')
{ "ok" : 1 }
> db.Student.drop()
true
> db.createCollection('Student')
{ "ok" : 1 }
> db.Student.insert({_id:1, name:"Medha Madhusudhan", grade:"15", hobbies: "running"});
WriteResult({ "nInserted" : 1 })
> db.Student.find({});
{ "_id" : 1, "name" : "Medha Madhusudhan", "grade" : "15", "hobbies" : "running" }
> db.Student.find({name: "Medha Madhusudhan"});
{ "_id" : 1, "name" : "Medha Madhusudhan", "grade" : "15", "hobbies" : "running" }
> db.Student.find({}, {name:1, grade:1, obbies: 0});
Error: error: {
        "ok" : 0,
        "errmsg" : "Cannot do exclusion on field obbies in inclusion projection",
        "code" : 31254,
        "codeName" : "Location31254"
}
> db.Student.find({}, {name:1, grade:1, hobbies: 0});
Error: error: {
        "ok" : 0,
        "errmsg" : "Cannot do exclusion on field hobbies in inclusion projection",
        "code" : 31254,
        "codeName" : "Location31254"
}
> db.Student.find({}, {_id: 0, name:1, grade:1, hobbies: 0});
Error: error: {
        "ok" : 0,
        "errmsg" : "Cannot do exclusion on field hobbies in inclusion projection",
        "code" : 31254,
        "codeName" : "Location31254"
}
> db.Student.find({}, {_id: 0});
{ "name" : "Medha Madhusudhan", "grade" : "15", "hobbies" : "running" }
> db.Student.find({}, {_id: 0, name: 1});
{ "name" : "Medha Madhusudhan" }
> db.Student.find({}, {_id: 0, name: 1, grade: 1});
{ "name" : "Medha Madhusudhan", "grade" : "15" }
> db.Student.find({}, {_id: 0, name: 1, grade: 1, hobbies: 0});
Error: error: {
        "ok" : 0,
        "errmsg" : "Cannot do exclusion on field hobbies in inclusion projection",
        "code" : 31254,
```



```
> db.Student.find({}, {_id: 0, name: 1, grade: 1});
{ "name" : "Medha Madhusudhan", "grade" : "15" }
> db.Student.find({}, {_id: 0, name: 1, grade: 1, hobbies: 0});
Error: error: {
        "ok" : 0,
        "errmsg" : "Cannot do exclusion on field hobbies in inclusion projection",
        "code" : 31254,
        "codeName" : "Location31254"
}
> db.Student.find({}, {_id: 0, name: 1, grade: 1, hobbies: 1});
{ "name" : "Medha Madhusudhan", "grade" : "15", "hobbies" : "running" }
>
> db.Student.find({grade:{$eq: "15"}}).pretty();
{
        "_id" : 1,
        "name" : "Medha Madhusudhan",
        "grade" : "15",
        "hobbies" : "running"
}
> db.Student.find({hobbies:{$in: ["running", "swimming"]}}).pretty();
{
        "_id" : 1,
        "name" : "Medha Madhusudhan",
        "grade" : "15",
        "hobbies" : "running"
}
> db.Student.find({name: /^M/}).pretty();
{
        "_id" : 1,
        "name" : "Medha Madhusudhan",
        "grade" : "15",
        "hobbies" : "running"
}
> db.Student.find({name: /e/}).pretty();
{
        "_id" : 1,
        "name" : "Medha Madhusudhan",
        "grade" : "15",
        "hobbies" : "running"
}
> db.Student.count()
1
> db.Student.insert({_id: 2, name: "Smruthi Madhusudhan", grade: "11", hobbies: "violins"});
WriteResult({ "nInserted" : 1 })
> db.Student.count()
2
> db.Student.find({hobbies: {$in: ["violins"]}}).pretty();
{
        "_id" : 2,
        "name" : "Smruthi Madhusudhan",
        "grade" : "11",
        "hobbies" : "violins"
}
> db.Student.find({}).sort({name: -1});
{ "_id" : 2, "name" : "Smruthi Madhusudhan", "grade" : "11", "hobbies" : "violins" }
```



```
>
> db.createCollection('Food');
{ "ok" : 1 }
> db.Food.find({});
> db.Food.count();
0
> db.Food.insert({_id: 1, food: ['apples', 'mangoes']});
WriteResult({ "nInserted" : 1 })
> db.Food.insert({_id: 2, food: ['strawberries', 'mangoes']});
WriteResult({ "nInserted" : 1 })
> db.Food.count();
2
> db.Food.find({food[0]: {$eq: 'apples'}});
uncaught exception: SyntaxError: missing : after property id :
@(shell):1:18
> db.Food.find({food: {$in: ['apples']}});
{ "_id" : 1, "food" : [ "apples", "mangoes" ] }
> db.Food.find({food: {$all: ['mangoes']}});
{ "_id" : 1, "food" : [ "apples", "mangoes" ] }
{ "_id" : 2, "food" : [ "strawberries", "mangoes" ] }
> db.Food.update({_id: 1}, {$set: {food.2: 'chips'}});
uncaught exception: SyntaxError: missing : after property id :
@(shell):1:37
> db.Food.update({_id: 1}, {$set: {'food.2': 'chips'}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Food.find({});
{ "_id" : 1, "food" : [ "apples", "mangoes", "chips" ] }
{ "_id" : 2, "food" : [ "strawberries", "mangoes" ] }
> db.Food.update({_id: 2}, {$push: {price: 100}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
>
>
> db.createCollection('Customer');
{ "ok" : 1 }
> db.Customer.insert({_id:1, custID: 123, balance: 1000, type: 'savings'});
WriteResult({ "nInserted" : 1 })
> db.Customer.insert({_id:2, custID: 123, balance: 2000, type: 'savings'});
WriteResult({ "nInserted" : 1 })
> db.Customer.insert({_id:3, custID: 456, balance: 3000, type: 'current'});
WriteResult({ "nInserted" : 1 })
> db.Customer.aggregate({$group: {_id: "$custID", totalbalance: {$sum: "$balance"}}});
{ "_id" : 456, "totalbalance" : 3000 }
{ "_id" : 123, "totalbalance" : 3000 }
>
> db.Customer.aggregate({$match: {"$type": "savings"}}, {$group: {_id: "$custID", totalbalance: {$sum: "$balance"}}});
uncaught exception: Error: command failed: {
        "ok" : 0,
        "errmsg" : "unknown top level operator: $type",
        "code" : 2,
        "codeName" : "BadValue"
} : aggregate failed :
_getErrorWithCode@src/mongo/shell/utils.js:25:13
doassert@src/mongo/shell/assert.js:18:14
_assertCommandWorked@src/mongo/shell/assert.js:639:17
```