

C:\Windows\system32\cmd.exe - mongo

```
>
<
  "_id" : 4,
  "Category" : "Visualisation",
  "BookName" : "Visualising Data",
  "Author" : "Ben Fry",
  "qty" : 12,
  "price" : 325,
  "rol" : 6,
  "pages" : 450
}
<
  "_id" : 5,
  "Category" : "Web Mining",
  "BookName" : "Learning R",
  "Author" : "Richard",
  "qty" : 6,
  "price" : 850,
  "rol" : 10,
  "pages" : 120
}
> var map = function(<<
...   var category;
...   if(this.pages>=300)
...     category = "Big books"
...   else
...     category = "Small Books"
...   emit(category, {
...     Bookname : this.Bookname});
... }
>
> var map = function(<<   var category;   if(this.pages>=300)   cate
```

C:\Windows\system32\cmd.exe - mongo

@<shell>:1:1

```
>
>
> use book
switched to db book
> db.createCollection("books")
{ "ok" : 1 }
> db.books.save(<_id:1,Category:"Machine Learning",BookName:"Machine Learning for Hackers",Author:"Drew Conway",qty:25,price:400,rol:30,pages:350>)
WriteResult(< "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 1 >)
> db.books.save(<_id:2,Category:"Business Intelligence",BookName:"Fundamentals of Business Analytics",Author:"Seema Acharya",qty:55,price:500,rol:30,pages:250>)
WriteResult(< "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 2 >)
> db.books.save(<_id:4,Category:"Visualisation",BookName:"Visualising Data",Author:"Ben Fry",qty:12,price:325,rol:6,pages:450>)
WriteResult(< "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 4 >)
> db.books.save(<_id:5,Category:"Web Mining",BookName:"Learning R",Author:"Richard",qty:6,price:850,rol:10,pages:120>)
WriteResult(< "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 5 >)
> db.books.find()
{ "_id" : 1, "Category" : "Machine Learning", "BookName" : "Machine Learning for Hackers", "Author" : "Drew Conway", "qty" : 25, "price" : 400, "rol" : 30, "pages" : 350 }
{ "_id" : 2, "Category" : "Business Intelligence", "BookName" : "Fundamentals of Business Analytics", "Author" : "Seema Acharya", "qty" : 55, "price" : 500, "rol" : 30, "pages" : 250 }
{ "_id" : 4, "Category" : "Visualisation", "BookName" : "Visualising Data", "Author" : "Ben Fry", "qty" : 12, "price" : 325, "rol" : 6, "pages" : 450 }
{ "_id" : 5, "Category" : "Web Mining", "BookName" : "Learning R", "Author" : "Richard", "qty" : 6, "price" : 850, "rol" : 10, "pages" : 120 }
> db.books.find().pretty()
<
  "_id" : 1,
  "Category" : "Machine Learning",
  "BookName" : "Machine Learning for Hackers",
  "Author" : "Drew Conway",
  "qty" : 25,
  "price" : 400,
  "rol" : 30,
  "pages" : 350
}
<
  "_id" : 2,
  "Category" : "Business Intelligence",
  "BookName" : "Fundamentals of Business Analytics",
  "Author" : "Seema Acharya",
  "qty" : 55,
  "price" : 500,
  "rol" : 30,
  "pages" : 250
}
<
  "_id" : 4,
  "Category" : "Visualisation",
  "BookName" : "Visualising Data",
```



C:\Windows\system32\cmd.exe - mongo

```
> show dbs
book    0.078GB
local   0.078GB
test     0.078GB
world    0.078GB
> use test
switched to db test
> db.data.find()
> db.data.find()
> db.data.aggregate([
...   { $group : { _id: null, sum: { $sum: "$age" } } }
... ])
> db.data.aggregate([
...   { $group : { _id: "Avg of income", avg: { $avg: "$income" } } }
... ])
>
>
> use arr
switched to db arr
> db.createCollection("Country")
{ "ok" : 1 }
> db.Country.insert({_id:1,Cities:["Bangalore","Chennai"]})
WriteResult({ "nInserted" : 1 })
> db.Country.insert({_id:2,Cities:["Hyderabad","Mumbai","Delhi"]})
WriteResult({ "nInserted" : 1 })
> db.Country.insert({_id:3,Cities:["rajamundry","jamshedpur","Jodhpur"]})
WriteResult({ "nInserted" : 1 })
> db.Country.find().pretty()
{ "_id" : 1, "Cities" : [ "Bangalore", "Chennai" ] }
{ "_id" : 2, "Cities" : [ "Hyderabad", "Mumbai", "Delhi" ] }
{ "_id" : 3, "Cities" : [ "rajamundry", "jamshedpur", "Jodhpur" ] }
> db.Country.update({_id:1},{ $push:{population:{Bangalore:30,Chennai:45}}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 2, "Cities" : [ "Hyderabad", "Mumbai", "Delhi" ] }
{ "_id" : 3, "Cities" : [ "rajamundry", "jamshedpur", "Jodhpur" ] }
{ "_id" : 1, "Cities" : [ "Bangalore", "Chennai" ], "population" : [ { "Bangalore" : 30, "Chennai" : 45 } ] }
> db.Country.update({_id:3},{ $pop:{Cities:1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 2, "Cities" : [ "Hyderabad", "Mumbai", "Delhi" ] }
{ "_id" : 3, "Cities" : [ "rajamundry", "jamshedpur" ] }
{ "_id" : 1, "Cities" : [ "Bangalore", "Chennai" ], "population" : [ { "Bangalore" : 30, "Chennai" : 45 } ] }
> db.Country.update({Cities:"Hyderabad"},{ $pull:{Cities:'Hyderabad'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 2, "Cities" : [ "Mumbai", "Delhi" ] }
{ "_id" : 3, "Cities" : [ "rajamundry", "jamshedpur" ] }
{ "_id" : 1, "Cities" : [ "Bangalore", "Chennai" ], "population" : [ { "Bangalore" : 30, "Chennai" : 45 } ] }
> db.Country.update({_id:1},{ $set:{'Cities.2':'Srinagar'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.update({_id:2},{ $addToSet:{Cities:"Trichi"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
```