

1.

The screenshot shows the Studio 3T interface for MongoDB. The left sidebar displays the database structure with collections: Company, admin, college, config, lab, and local. The main editor shows a MapReduce operation on the 'books' collection. The map function iterates over each document, categorizing books as 'Big books' (pages >= 300) or 'Small books' (pages < 300). The reduce function then counts the number of documents in each category. The output is a single document with the following structure:

```
{
  "Small books": 4,
  "Big books": 4
}
```

The bottom status bar indicates that 1 document was selected and the operation took 0.003s.

2.

The screenshot shows the Studio 3T interface for MongoDB. The left sidebar displays the database structure with collections: Company, admin, college, config, lab, and local. The main editor shows an aggregate operation on the 'MongoDBHandsOn' collection. The pipeline consists of two \$group stages. The first stage groups documents by 'sex' and calculates the sum of 'children'. The second stage groups documents by 'region' and calculates the average of the 'sum' field. The output is a single document with the following structure:

```
{
  "region": "INNER_CITY",
  "avg": 1.5
}
```

The bottom status bar indicates that 1 document was selected and the operation took 0.008s.

3.

Studio 3T for MongoDB - TRIAL LICENSE

File Edit Database Collection Index Document GridFS View Help

Connect Collection IntelliShell SQL Aggregate Map-Reduce Compare Schema Tasks Export Import SQL Migration Users Roles Server 3T Feedback

Search Open Connections (Ctrl+F)

IntelliShell: mongod+srv://kb:<password>@cluster0.pyjk.mongodb.net/test

```
1 use local
2 db.createCollection("Country");
3
4 db.Country.insert({_id:1,Cities:["Delhi","Banglore"]});
5 db.Country.insert({_id:2,Cities:["Chennai","Mumbai","Ranchi"]});
6 db.Country.insert({_id:3,Cities:["Pune","Kajkot","Hyderabad"]});
7
8 db.Country.find()
9
10 db.Country.find().limit(1)
11 db.Country.find().skip(2).limit(2)
12
13 db.Country.update({_id:1},{push: {population: {Delhi:30,Banglore:45}}})
14 db.Country.find()
15
16 WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
17
```

Operations

Type here to search

DESKTOP-TVPSKQO (C:\Pr_in\mongod.exe-4.4.1) > local

Studio 3T for MongoDB - TRIAL LICENSE

File Edit Database Collection Index Document GridFS View Help

Connect Collection IntelliShell SQL Aggregate Map-Reduce Compare Schema Tasks Export Import SQL Migration Users Roles Server 3T Feedback

Search Open Connections (Ctrl+F)

IntelliShell: mongod+srv://kb:<password>@cluster0.pyjk.mongodb.net/test

```
10 db.Country.find().limit(1)
11 db.Country.find().skip(2).limit(2)
12
13 db.Country.update({_id:1},{push: {population: {Delhi:30,Banglore:45}}})
14 db.Country.find()
15
16 db.Country.update({_id:3},{pop: {Cities:1}})
17 db.Country.find()
18
19 db.Country.update({Cities:"Chennai"},{$pull: {Cities:"Chennai"}})
20 db.Country.find()
21
22 db.Country.update({_id:1},{set: {Cities:2:"Springar"}})
23 db.Country.update({_id:2},{addToSet: {Cities:"Hyane"}})
24 db.Country.find()
25
26 WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
27
```

Operations

Type here to search

DESKTOP-TVPSKQO (C:\Pr_in\mongod.exe-4.4.1) > local