

<https://docs.mongodb.com/manual/reference/operator/update/positional/#up. S>

6) A quants documents hi ha la etiqueta "foo" ? Esborra aquests documents

Borja

```
db.books.deleteMany({tags: "foo"})
{ "acknowledged" : true, "deletedCount" : 0 }
```

Dani

```
db.books.remove({"tags":"foo"})
WriteResult({ "nRemoved" : 0 })
```

<http://media.mongodb.org/zips.json>

```
$ mongoimport --db rb --collection zipcodes --file /tmp/zips.json
```

```
imported 29353 documents
```

<https://docs.mongodb.com/manual/tutorial/aggregation-zip-code-data-set/>

Population average per zip code / state

dani

```
db.zipcodes.aggregate( [ { $group: { _id: "$state", avgZipCodePop: { $avg: "$pop" } } } ] )
```

```
db.zipcodes.aggregate( [
...   { $group: { _id: "$state", avgZipCodePop: { $avg: "$pop" } } }
... ] )
{ "_id" : "CA", "avgZipCodePop" : 19627.236147757256 }
{ "_id" : "MT", "avgZipCodePop" : 2544.420382165605 }
{ "_id" : "MS", "avgZipCodePop" : 7088.749311294766 }
{ "_id" : "FL", "avgZipCodePop" : 15779.407960199005 }
```

```
db.zipcodes.aggregate( { $group: { _id: "$state", avgCityPop: { $avg: "$pop" } } } )  
{ "_id" : "CA", "avgCityPop" : 19627.236147757256 }  
{ "_id" : "MT", "avgCityPop" : 2544.420382165605 }  
{ "_id" : "MS", "avgCityPop" : 7088.749311294766 }
```

```
quim  
select avg(pop) from zipcode group by state  
dani  
select avg(pop) from zipcode group by state
```

```
borja  
select state, avg(pop) as avgZipCodePop  
from zipcodes  
group by state
```

1. What is the population of FISHERS ISLAND
2. List all the cities in the state "MA"
3. List all the cities with a population between 1 and 10 inclusive and their population
4. List all the cities in the state "MA" with a population less than 100
5. List all of the distinct states
6. List the distinct states that contain a city with a population above 100,000
7. What is the size of the smallest city (by population) in each state?
8. What is the name of the smallest city (by population) in each state? Use the reduce function of a group command to find the smallest population.
9. List the average population size for each state
10. How many cities does state WA have?
11. List all the states and the number of cities they contain. Use an aggregation pipeline, and here is a clue: there is no \$count operator, but you can use \$sum:1
12. List all the states that fewer than 100 cities – extend your pipeline from above.
13. A lot of cities are listed more than once, even though they are in the same state. Which cities are mentioned more than 50 times in the same state?
14. List all the city names that appear in more than twenty different states, along with their states
15. What is the total population of all the NY postcodes?
16. How many different postcodes are there in the NY state?
17. Find all the states with a total population above 10 million (this requires a sum and a selection) – don't just lookup single entries with a population of over 10 million)