

```
> show dbs
admin      0.000GB
config     0.000GB
local      0.000GB
practice   0.000GB
testdb     0.000GB
> use practice
switched to db practice
> show collections
bank
sales
```

```
> db.bank.find().limit(1).pretty()
{
  "_id" : ObjectId("63995917ba9ee0a78327055e"),
  "age" : 44,
  "marital" : "married",
  "balance" : 6203,
  "contact" : "cellular",
  "duration" : 58,
  "outcome" : "failure",
  "date" : "17-Nov"
}
```

1. Find the number of customers

- who are aged 40 and above
- married
- and the campaign outcome was successful for them

```
> db.bank.find({$and : [{'age':{$gte:40}},{'marital':'married'},{'outcome':'success'}]}).count()
32
```

2. Find the median age for the given list of customers?

```
> db.bank.find().count()
825
> db.bank.find().sort({'age':1}).skip(422).limit(1).pretty()
{
  "_id" : ObjectId("63995917ba9ee0a7832706aa"),
  "age" : 40,
  "marital" : "married",
  "balance" : 2133,
  "contact" : "cellular",
  "duration" : 377,
  "outcome" : "failure",
  "date" : "06-Apr"
}
```

3. Find the number of customers who were contacted in the month of February ('Feb')?

```
> db.bank.find({'date': {$regex:/\-Feb/}}).count()
111
```

4. For all the customers who are

- either single or divorced
- and either contacted through cellular or telephone
- find the highest balance ?

```
> db.bank.find({$and:[{'contact': {$in:['cellular','telephone']}},{'marital':{$in:['single','divorced']}}]}).sort({'balance':-1}).limit(1).pretty()
{
  "_id" : ObjectId("63995917ba9ee0a7832706b7"),
  "age" : 53,
  "marital" : "divorced",
  "balance" : 8112,
  "contact" : "cellular",
  "duration" : 75,
  "outcome" : "failure",
  "date" : "15-Apr"
}
```

5. find all customers

- who are age greater than equal to 40
- who has balance > 6000

```
> db.bank.find({$and:[{'age': {$gte: 40}},{'balance':{$gte:6000}}]}).count()
9
```

6. lowest balance

```
> db.bank.find().sort({balance:1}).limit(1).pretty()
{
  "_id" : ObjectId("63995917ba9ee0a7832707dd"),
  "age" : 45,
  "marital" : "married",
  "balance" : -1621,
  "contact" : "cellular",
  "duration" : 8,
  "outcome" : "failure",
  "date" : "15-May"
}
```

7. highest balance

```
> db.bank.find().sort({balance:-1}).limit(1).pretty()
{
  "_id" : ObjectId("63995917ba9ee0a783270598"),
  "age" : 33,
  "marital" : "married",
  "balance" : 17455,
  "contact" : "cellular",
  "duration" : 168,
  "outcome" : "failure",
  "date" : "18-Nov"
}
```