TP 5 MONGODB

djennaoui raouf 2014 0000 2338

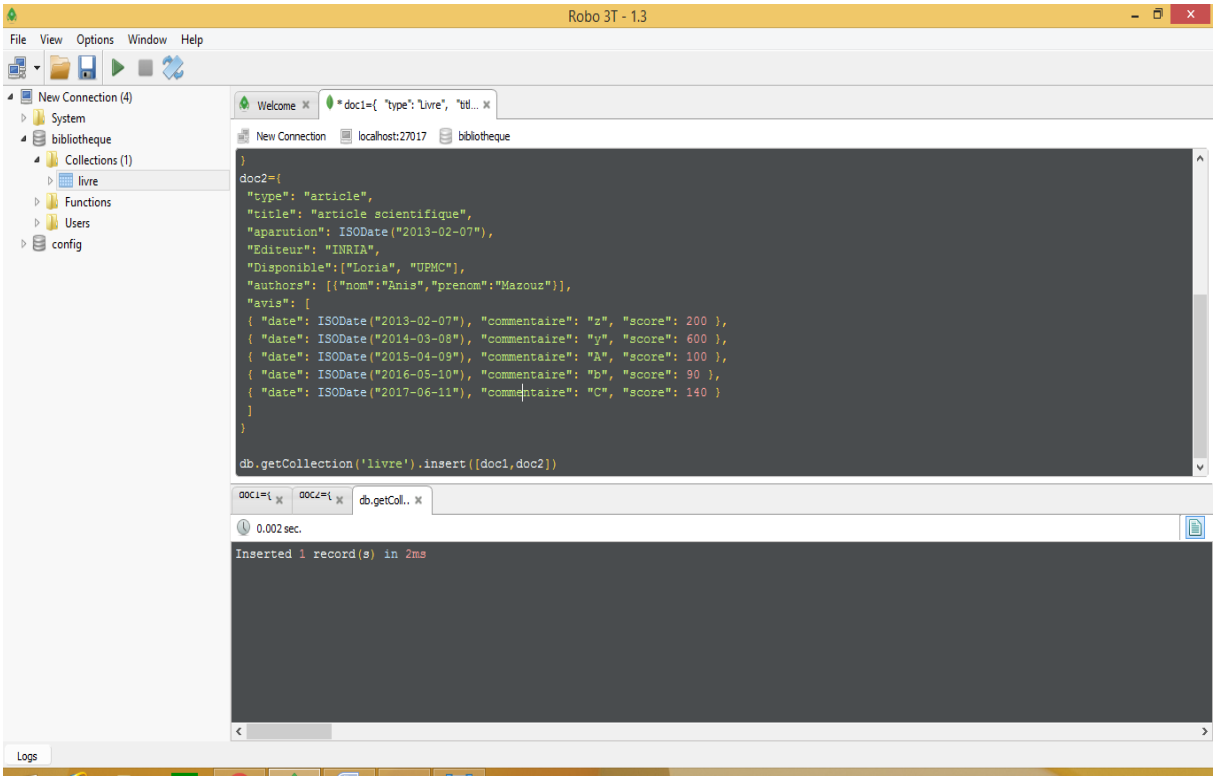
1)

```
doc1={
    "type": "Livre",
    "title": "Modern Database Systems: The Object Model, Interoperability, and Beyond",
    "apparition": ISODate("2012-02-07"),
    "Editeur": "Eyrolles",
    "Disponible":["Amazon", "Fnac"],
    "authors": [{"nom":"Youcef","prenom":"Benkheda"}],
    "avis": [
        { "date": ISODate("2013-02-07"), "commentaire": "A", "score": 2 },
        { "date": ISODate("2014-03-08"), "commentaire": "C", "score": 6 },
        { "date": ISODate("2015-04-09"), "commentaire": "A", "score": 10 },
        { "date": ISODate("2016-05-10"), "commentaire": "b", "score": 9 },
        { "date": ISODate("2017-06-11"), "commentaire": "C", "score": 14 }
    ]
}
```

```
doc2={
    "type": "article",
    "title": "article scientifique",
    "aparution": ISODate("2013-02-07"),
    "Editeur": "INRIA",
    "Disponible":["Loria", "UPMC"],
    "authors": [{"nom":"Anis","prenom":"Mazouz"}],
    "avis": [
        { "date": ISODate("2013-02-07"), "commentaire": "z", "score": 200 },
        { "date": ISODate("2014-03-08"), "commentaire": "y", "score": 600 },
        { "date": ISODate("2015-04-09"), "commentaire": "A", "score": 100 },
        { "date": ISODate("2016-05-10"), "commentaire": "b", "score": 90 },
        { "date": ISODate("2017-06-11"), "commentaire": "C", "score": 140 }
    ]
}
```

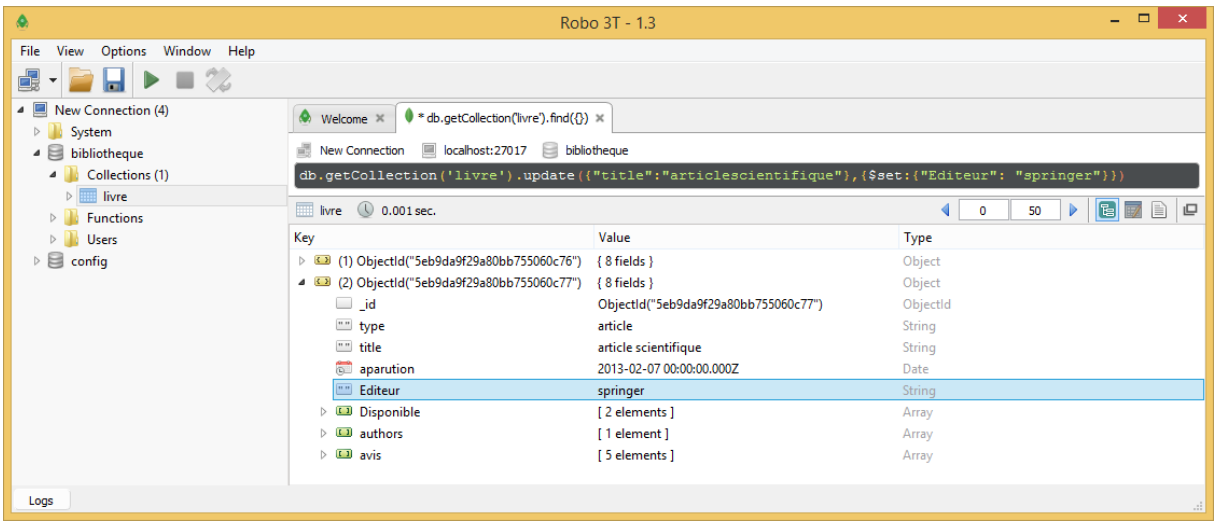
db.getCollection('livre').insert([doc1,doc2])

insertion des deux variable doc1 et doc2 voir la figure suivante:



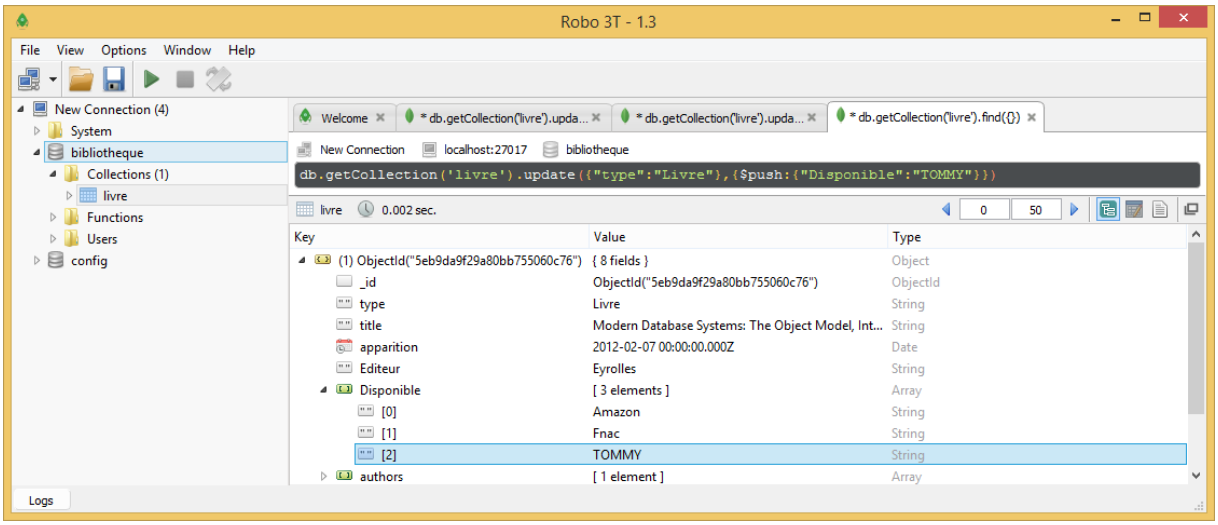
2)

db.getCollection('livre').update({"title":"article scientifique"},{$set:{"Editeur": "springer"}})



3)

db.getCollection('livre').update({"type":"Livre"},{$push:{"Disponible":"TOMMY"}})

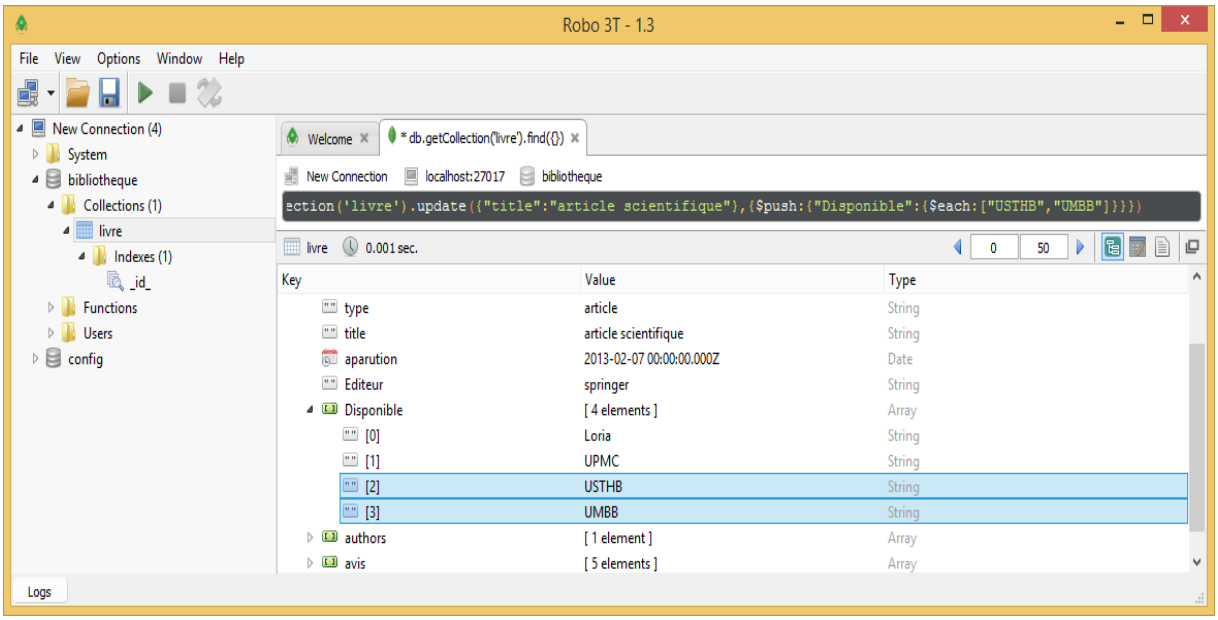


4)

db.getCollection('livre').update({"title":"article scientifique"},{$addToSet:{"Disponible":{$each:["USTHB","UMBB"]}}})

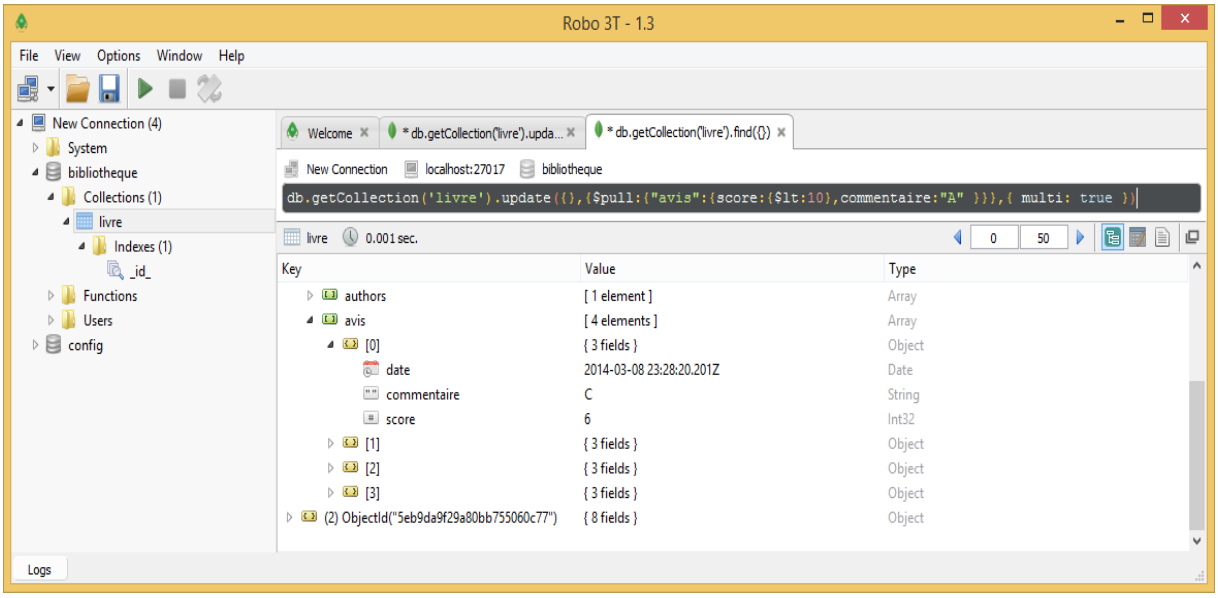
ou bien

db.getCollection('livre').update({"title":"article scientifique"},{$push:{"Disponible":{$each:["USTHB","UMBB"]}}})



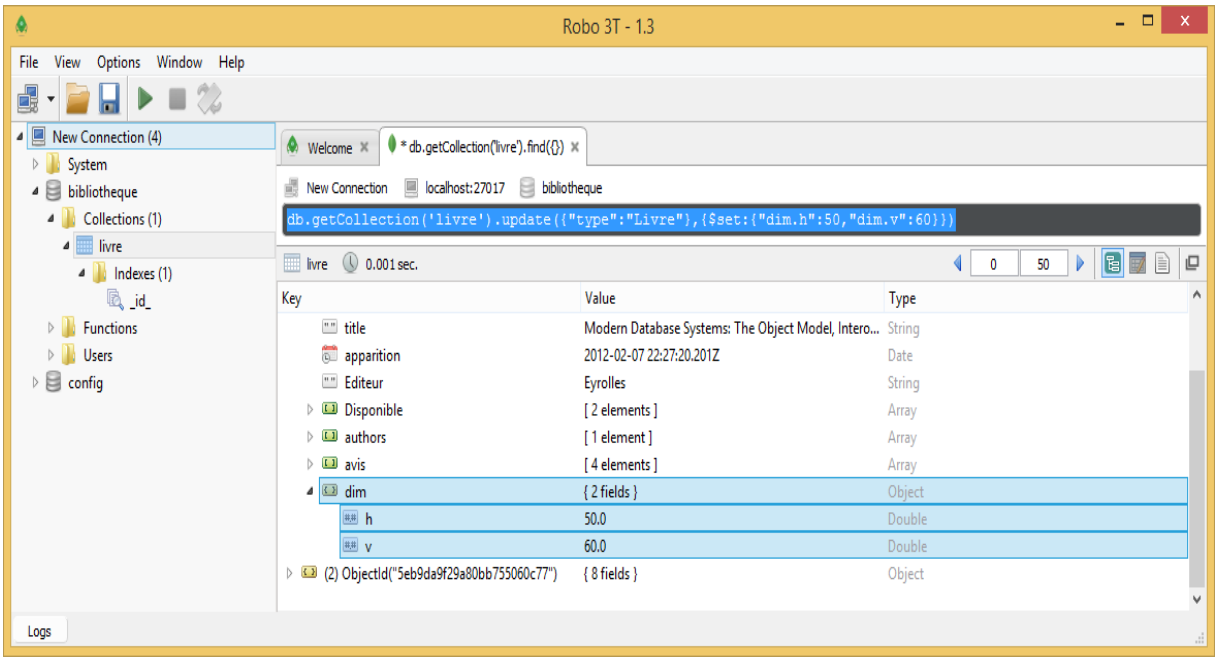
5)

db.getCollection('livre').update({},{$pull:{"avis":{score:{$lt:10},commentaire:"A" }}},{ multi: true })



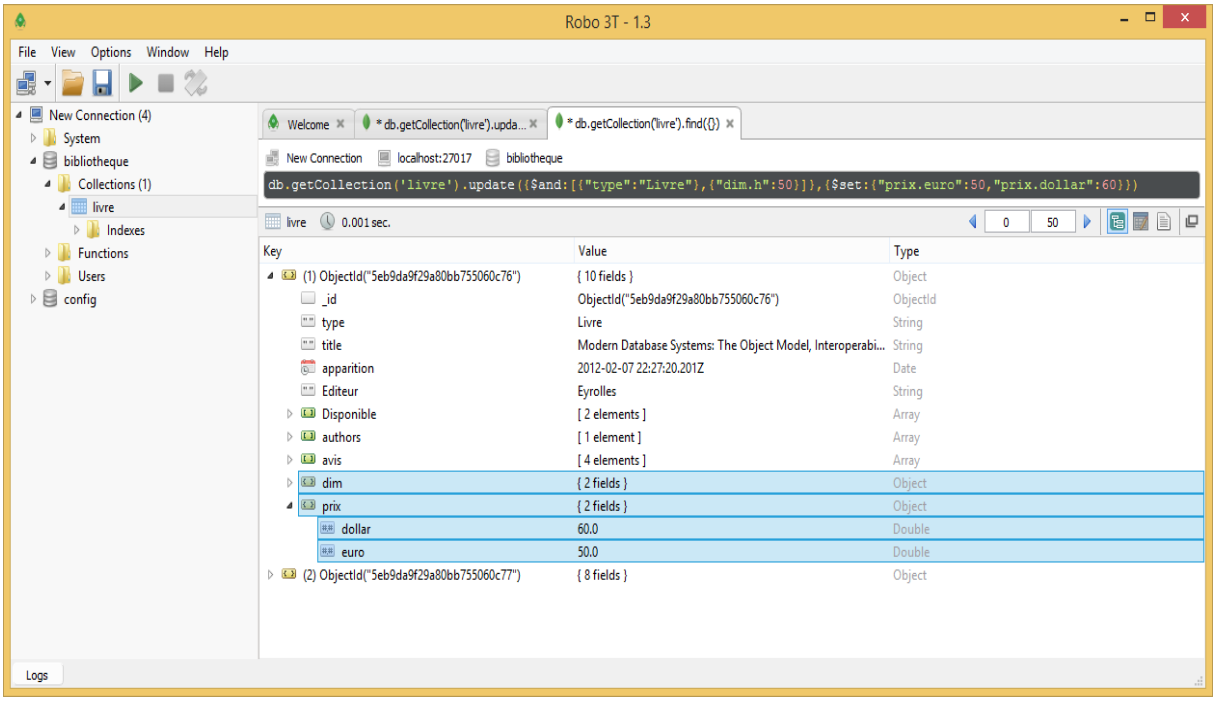
6)

db.getCollection('livre').update({"type":"Livre"},{$set:{"dim.h":50,"dim.v":60}})



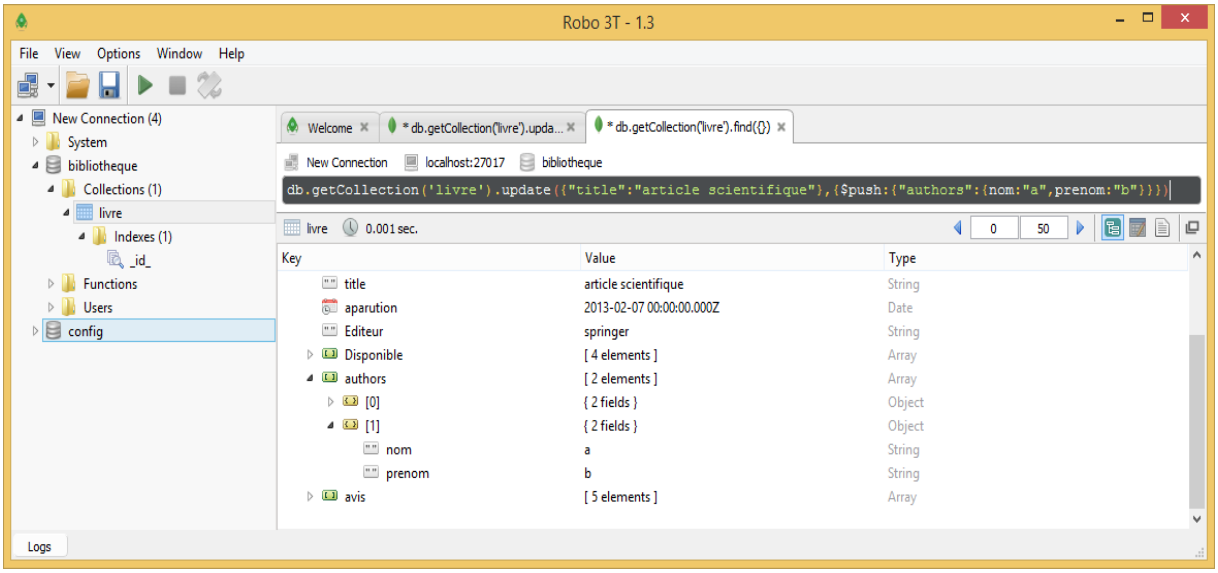
7)

db.getCollection('livre').update({$and:[{"type":"Livre"},{"dim.h":50}]},{$set:{"prix.euro":50,"prix.dollar":60}})



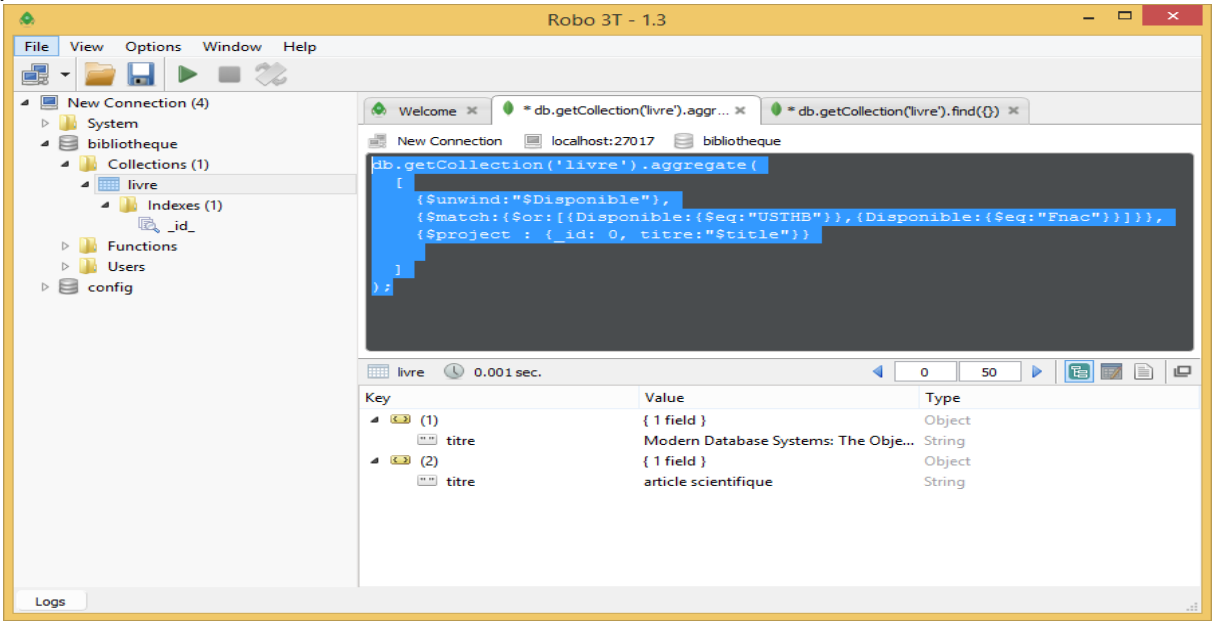
8)

db.getCollection('livre').update({"title":"article scientifique"},{$push:{"authors":{nom:"a",prenom:"b"}}})



9)

```
db.getCollection('livre').aggregate(
  [
    {$unwind:"$Disponible"},
    {$match:{$or:[{Disponible:{$eq:"USTHB"}},{Disponible:{$eq:"Fnac"}}]}},
    {$project : {_id: 0, titre:"$title"}}
  ]
);
```



<u>remarque:</u>

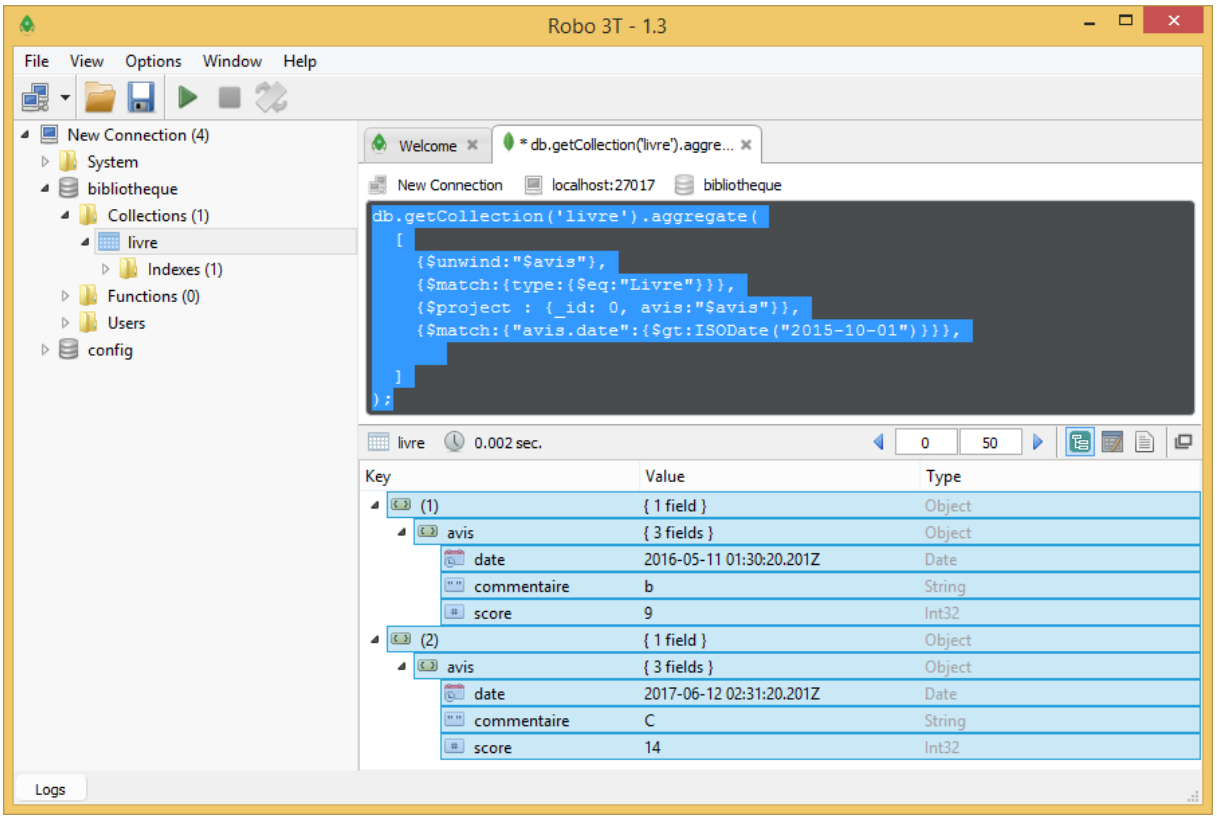
$unwind

Déconstruit un champ de tableau à partir des documents d'entrée pour sortir un document pour *chaque* élément. Chaque document de sortie est le document d'entrée avec la valeur du champ tableau remplacée par l'élément.

10)

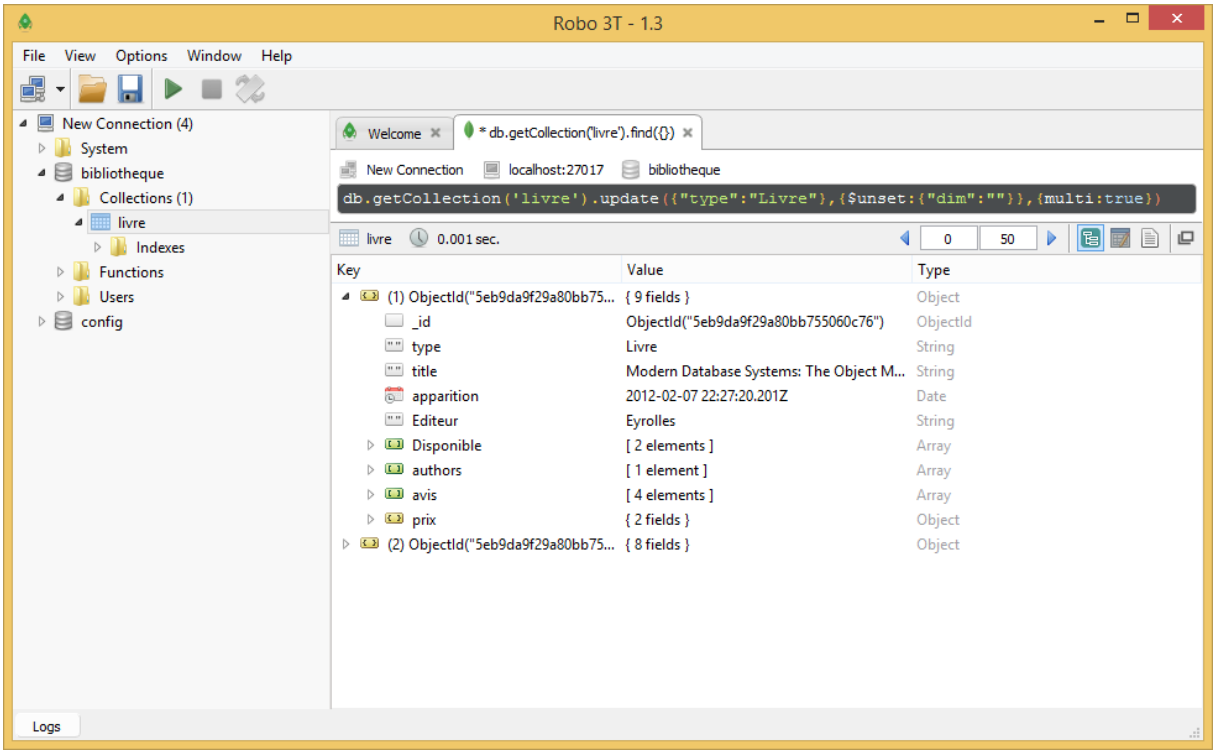
```
db.getCollection('livre').aggregate(
[
{$unwind:"$avis"},
{$match:{type:{$eq:"Livre"}}},
{$project : {_id: 0, avis:"$avis"}},
{$match:{"avis.date":{$gt:ISODate("2015-10-01")}}},

]
);
```



11)

db.getCollection('livre').update({"type":"Livre"},{$unset:{"dim":""}},{multi:true})



13)

```
db.getCollection('livre').aggregate([
  { $group : { _id : "$type", titre:{$push:"$title" } } },
  { $out:"doc"}
 ])
```