Pt2 - insercions, borrats i modificacions

1. Inseriu un nou usuari a la col·lecció **users** en, com a mínim, els mateixos camps que els actuals, i en **user_id** *user5*.

Insert

2. Borreu l'anterior usuari de manera que només se borre el primer document trobat, en cas de que n'hi haigue més d'un (tot i això, feu la sentència correcta per a que només complisque el criteri de búsqueda el nou usuari *user5*).

Consulta

```
db.users.remove({"user_id":"user5"})
WriteResult({ "nRemoved" : 1 })
```

Al hacer un find no encuentra nada porque no existe

```
wilteResult({ | likelloved : 1 })
> db.users.find({"user_id":"user5"}).pretty()
>
```

3. Feu una sentència d'actualització que incremente l'edat de tots els usuaris (camp age) en 5 anys.

```
> db.users.find({},{"user_id":1,"sex":1,"age":1}).pretty()
{
        "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
        "user_id" : "user2",
        "sex" : "Male",
        "age" : 29
}
{
        "_id" : ObjectId("528f35450fe5e6467e58ae79"),
        "user_id" : "user3",
        "sex" : "Female",
        "age" : 24
}
{
        "_id" : ObjectId("528f34950fe5e6467e58ae77"),
        "user_id" : "user1",
        "sex" : "Male",
        "age" : 22
}
{
        "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
        "user_id" : "user4",
        "sex" : "Female",
        "age" : 27
}
```

```
db.users.find({},{"user_id":1,"sex":1,"age":1}).pretty()
{
        "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
        "user_id" : "user2",
        "sex" : "Male",
        "age" : 34
}
{
        "_id" : ObjectId("528f35450fe5e6467e58ae79"),
        "user_id" : "user3",
        "sex" : "Female",
        "age" : 29
}
{
        "_id" : ObjectId("528f34950fe5e6467e58ae77"),
        "user_id" : "user1",
        "sex" : "Male",
        "age" : 27
}
{
        "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
        "user_id" : "user4",
        "sex" : "Female",
        "age" : 32
}
```

4. Feu una sentència d'actualització que canvie el sexe del primer usuari *Male* per *Female* (camp **sex**).

Registros

```
> db.users.find({},{"user_id":1,"sex":1,"age":1}).pretty()
{
        "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
        "user_id" : "user2",
        "sex" : "Male",
        "age" : 34
}
{
        "_id" : ObjectId("528f35450fe5e6467e58ae79"),
        "user_id" : "user3",
        "sex" : "Female",
        "age" : 29
}
{
        "_id" : ObjectId("528f34950fe5e6467e58ae77"),
        "user_id" : "user1",
        "sex" : "Male",
        "age" : 27
}
{
        "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
        "user_id" : "user4",
        "sex" : "Female",
        "age" : 32
}
```

```
> db.users.update({"sex":"Male"},{
... $set : {"sex": "Female"},
... $currentDate : {"lastModified":true}
... })
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

```
> db.users.find({},{"user_id":1,"sex":1,"age":1}).pretty()
{
        "_id" : ObjectId("528f34fa0fe5e6467e58ae78"),
        "user_id" : "user2",
        "sex" : "Female",
        "age" : 34
}
{
        "_id" : ObjectId("528f35450fe5e6467e58ae79"),
        "user_id" : "user3",
        "sex" : "Female",
        "age" : 29
}
{
        "_id" : ObjectId("528f34950fe5e6467e58ae77"),
        "user_id" : "user1",
        "sex" : "Male",
        "age" : 27
}
{
        "_id" : ObjectId("528f35860fe5e6467e58ae7a"),
        "user_id" : "user4",
        "sex" : "Female",
        "age" : 32
}
```

5. Feu una sentència d'actualització que modifique la data d'alta a la comunitat (camp date_of_join) posant la data actual, per als usuaris de la extra.community_name ATHELATIC (operador \$currentDate).

Usuario con "extra.communiy_name" = "ATHELATIC"

Registros luego de la consulta

 Inseriu un nou usuari user6 (només cal que tingue el camp user_id). Feu una sentència d'actualització que reemplace este nou usuari per un altre document que sigue de l'user_id user7, en edat 18 anys (poseu-li un camp anomenat edat).

Insert

```
> db.users.insert({"user_id": "user6"})
WriteResult({ "nInserted" : 1 })
```

Registros

```
> db.users.find({},{"user_id":1})
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2" }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3" }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1" }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4" }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user6" }
>
```

```
b db.users.update({"user_id":"user6"},{ "user_id":"user7", "edat":"18" })
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

Registros luego de la consulta

7. Feu una sentència d'actualització que reanomene el camp **edat** per **age** (operador \$rename) per a l'usuari *user*7.

Registro

Consulta

8. Feu una sentència d'actualització que elimine el camp **password** per a tots els usuaris (operador \$unset).

Registros

Consulta

```
> db.users.updateMany({},{$unset : {"password":""}})
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 4 }
```

```
> db.users.find({},{"user_id":1,"password":1}).pretty()
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2" }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3" }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1" }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4" }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7" }
```

9. Feu una sentència d'actualització que pose a 25 anys l'edat (camp **age**) dels usuaris en edat superior a 25 (operador \$min).

Registros

```
> db.users.find({},{"user_id":1,"age":1})
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2", "age" : 26 }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3", "age" : 14 }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1", "age" : 18 }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4", "age" : 30 }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7", "age" : 29 }
```

Consulta

```
> db.users.updateMany({},{ $min : {"age":25} })
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 3 }
```

Registros luego de la consulta

```
> db.users.find({},{"user_id":1,"age":1})
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2", "age" : 25 }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3", "age" : 14 }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1", "age" : 18 }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4", "age" : 25 }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7", "age" : 25 }
```

10. Feu una sentència d'actualització que afegisque el camp de tipo array **extra.visits** en valor // (array buit) a tots els usuaris (operador \$set).

```
> db.users.find({},{"user_id":1,"extra.visits":1})
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2", "extra" : { } }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3", "extra" : { } }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1", "extra" : { } }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4", "extra" : { } }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7" }
```

```
db.users.updateMany({},{$set:{"extra.visits":[]}})
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 1 }
>
```

Registros luego de la consulta

```
de.users.find({},{"user_id":1,"extra.visits":1})
{ "_id" : ObjectId("528f34fa0fe5e6467e58ae78"), "user_id" : "user2", "extra" : { "visits" : [ ] } }
{ "_id" : ObjectId("528f35450fe5e6467e58ae79"), "user_id" : "user3", "extra" : { "visits" : [ ] } }
{ "_id" : ObjectId("528f34950fe5e6467e58ae77"), "user_id" : "user1", "extra" : { "visits" : [ ] } }
{ "_id" : ObjectId("528f35860fe5e6467e58ae7a"), "user_id" : "user4", "extra" : { "visits" : [ ] } }
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7", "extra" : { "visits" : [ ] } }
```

11. Poseu la data del dia d'avui (pot ser en format "dd/mm/aaaa") com d'última visita per a l'usuari *user7* al camp afegit al punt anterior **extra.visits** (operador \$push).

Registros

```
> dD.users.find({"user_id": "user7"},{"user_id":1,"extra.visits":1})
{ "_id" : ObjectId("5cc72ccaa0d4c53f7c74b5d3"), "user_id" : "user7", "extra" : { "visits" : [ ] } }
>
```

Consulta

```
> db.users.update({"user_id":"user7"},{$push:{"extra.visits":new Date(2019,05,06) }})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```

12. Poseu la data d'avui a tots els usuaris de manera que a l'*user7* no se li repetisque la posada anteriorment (operador \$addToSet).

Registros

Consulta

```
}
> db.users.updateMany({},{$addToSet:{"extra.visits":new Date(2019,05,06) }})
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 4 }
```

Registros luego de la consulta

13. Afegiu un parell de dates diferents més a tots els usuaris a la posició 0 de l'array de visites **extra.visits** (operador \$push en modificador \$position i \$each).

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1})

db.users.find({},{"_id":0,"user_id":1,"extra.visits":1})

"user_id" : "user1", "extra" : { "visits" : [ ISODate("2019-06-05T22:00:00Z") ] } }

"user_id" : "user3", "extra" : { "visits" : [ ISODate("2019-06-05T22:00:00Z") ] } }

"user_id" : "user4", "extra" : { "visits" : [ ISODate("2019-06-05T22:00:00Z") ] } }

"user_id" : "user2", "extra" : { "visits" : [ ISODate("2019-06-05T22:00:00Z") ] } }

"user_id" : "user7", "extra" : { "visits" : [ ISODate("2019-06-05T22:00:00Z") ] } }
```

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1}).pretty()
```

```
{
        "user_id": "user1",
        "extra" : {
                "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user3",
        "extra" : {
                "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user4",
        "extra" : {
                "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
{
        "user_id": "user2",
        "extra" : {
                "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
```

14. Elimineu la <u>darrera data</u> afegida a l'usuari *user7* (operador \$pop). Feu el mateix en la <u>primera data</u> de l'usuari *user7*.

Registros

Registro luego de la consulta

Consulta

```
}
> db.users.update({"user_id":"user7"},{$pop :{"extra.visits":1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```

15. Elimineu de tots els usuaris la primera de les dates introduïdes anteriorment (busqueu-la directament pel seu valor) al camp **extra.visits** (operador \$pull).

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1}).pretty()
```

```
{
        "user_id": "user1",
        "extra" : {
                "visits":[
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user3",
        "extra" : {
                 "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
{
        "user_id": "user4",
        "extra" : {
                 "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
{
        "user_id": "user2",
        "extra" : {
                 "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user7",
        "extra" : {
                 "visits" : [
                        ISODate("1975-04-12T22:00:00Z"),
                        ISODate("2019-06-05T22:00:00Z")
```

```
}
```

```
db.users.update(
{},
{$pull : { "extra.visits" : ISODate("1975-04-12T22:00:00Z")}},
{multi : true}
)
```

```
> db.users.update( {}, {$pull : { "extra.visits" : ISODate("1975-04-12T22:00:00Z")}}, {multi : true} )
WriteResult({ "nMatched" : 5, "nUpserted" : 0, "nModified" : 5 })
```

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1}).pretty()
```

```
"user_id": "user1",
        "extra" : {
                "visits":[
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user3",
        "extra" : {
                 "visits" : [
                        ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user4",
        "extra" : {
                "visits":[
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
{
        "user_id": "user2",
        "extra" : {
                 "visits" : [
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
```

16. Sustituiu una de les dates de les visites per la data actual (\$currentDate) a tots els usuaris (operador \$).

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1}).pretty()
```

```
{
        "user_id": "user1",
        "extra" : {
                "visits":[
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user3",
        "extra" : {
                "visits" : [
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user4",
        "extra":{
                "visits":[
                         ISODate("1999-03-13T23:00:00Z"),
                         ISODate("2019-06-05T22:00:00Z")
                ]
        }
        "user_id": "user2",
        "extra" : {
                 "visits" : [
```

```
> 
> db.users.updateMany( {}, { $currentDate : {"extra.visits.$[]": true}} )
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 5 }
>
```

```
db.users.find({},{"_id":0,"user_id":1,"extra.visits":1}).pretty()
```

```
"user_id": "user1",
"extra" : {
        "visits" : [
                ISODate("2019-05-06T08:40:08.373Z"),
                ISODate("2019-05-06T08:40:08.373Z")
        ]
}
"user_id": "user3",
"extra" : {
        "visits" : [
                ISODate("2019-05-06T08:40:08.373Z"),
                ISODate("2019-05-06T08:40:08.373Z")
        ]
}
"user_id": "user4",
"extra" : {
        "visits" : [
                ISODate("2019-05-06T08:40:08.373Z"),
```