

MONGO SOLUCIONES

```
// Script 1. Create database and insert data
```

```
use cyber_security_dep
```

```
db.dropDatabase()
```

```
use cyber_security_dep
```

```
db.createCollection("attacks")
```

```
var p1 = { type: "DDoS", found_by: "MrSmith", timestamp: new Date("2016-01-15T12:34:56"),  
  effects: [ { code: "RFD789", ip: "52.58.78.16", severity: 0.7, cost: 1000 },  
    { code: "HGF321", ip: "99.86.230.121", severity: 0.3, cost: 500 } ] }
```

```
var p2 = { type: "SQLi", found_by: "Lock",  
  effects: [ { code: "CVB654", ip: "52.58.78.16", severity: 0.65, cost: 800 },  
    { code: "ZQW123", ip: "13.249.134.92", severity: 0.5, cost: 300 },  
    { code: "LKJ963", ip: "13.249.134.92", severity: 0.5, cost: 100 } ] }
```

```
var p3 = { type: "SQLi", timestamp: new Date("2016-07-31T19:20:21"),  
  effects: [ { code: "WSX258", ip: "104.18.26.25", severity: 0.6, cost: 600 },  
    { code: "EDC369", ip: "104.18.26.25", severity: 0.75, cost: 800 } ] }
```

```
db.attacks.insertMany([p1,p2,p3])
```

```
// Script 2. Update the information and list data.
```

```
// Update the information of the attacks that have the *type* "DDoS" and change the *found_by*  
field to "Neo".
```

```
db.attacks.updateMany({ type: "DDoS" }, { $set: { found_by: "Neo" } })
```

```
// List all the fields of all the records, ordered by *found_by*.
```

```
db.attacks.find().sort({ found_by: 1 })
```

```
// List the *type* and *effects* of all the attacks found by "Neo" or without a *found_by* field.
```

```
db.attacks.find({ $or: [ { found_by: "Neo" }, { found_by: { $exists: false } } ] }, { type: 1, effects:  
1, _id: 0 })
```

```
// List the *type*, *found_by*, *timestamp* and *ip* of the attacks that have any effect with a  
*cost* greater than 700.
```

```
db.attacks.find({ "effects.cost": { $gt: 700 } }, { type: 1, found_by: 1, timestamp: 1, "effects.ip": 1,  
_id: 0 })
```