

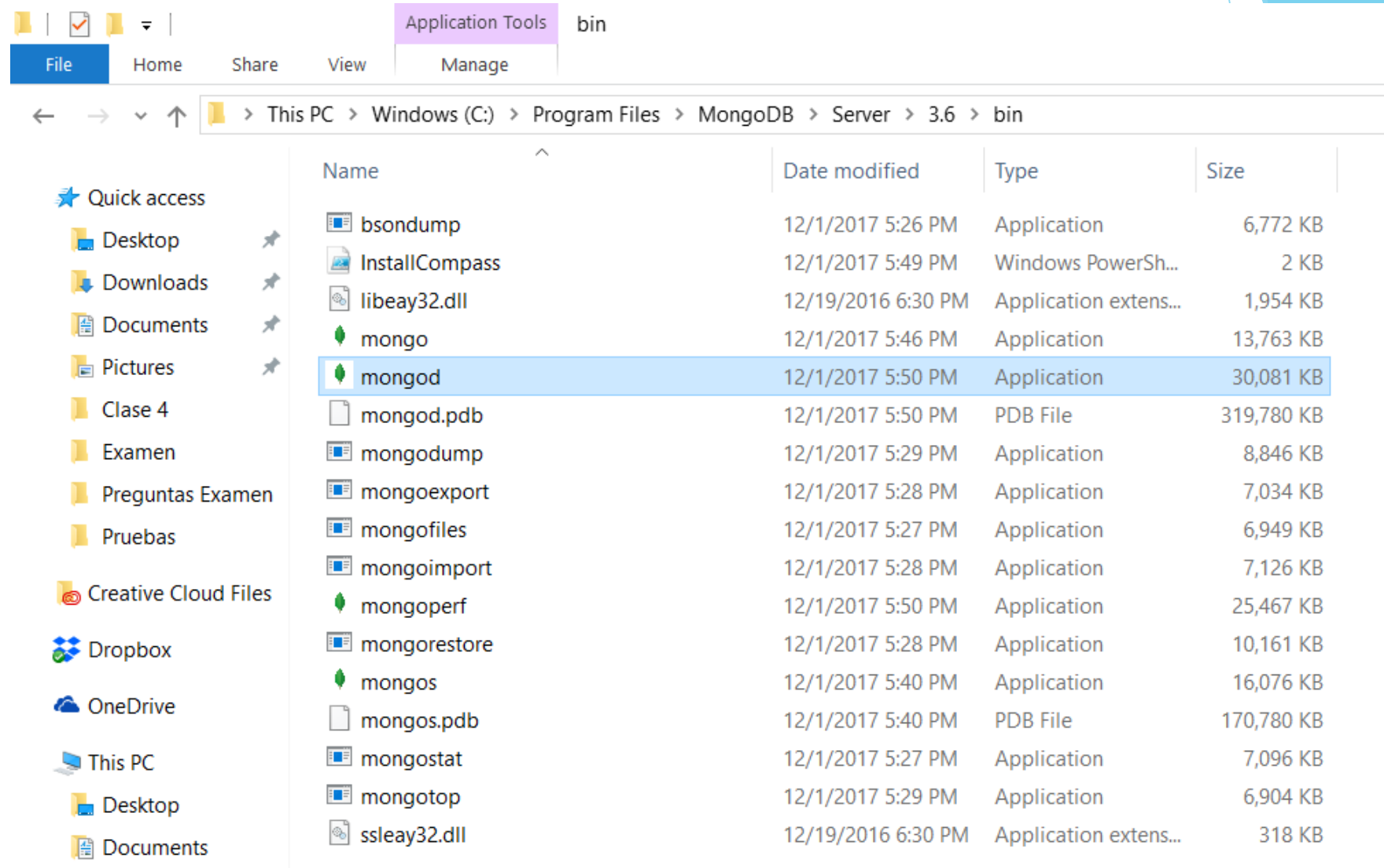
MongoDb - Clase 4

CRUD

(Create/Read/Update/Delete)

Cindy López

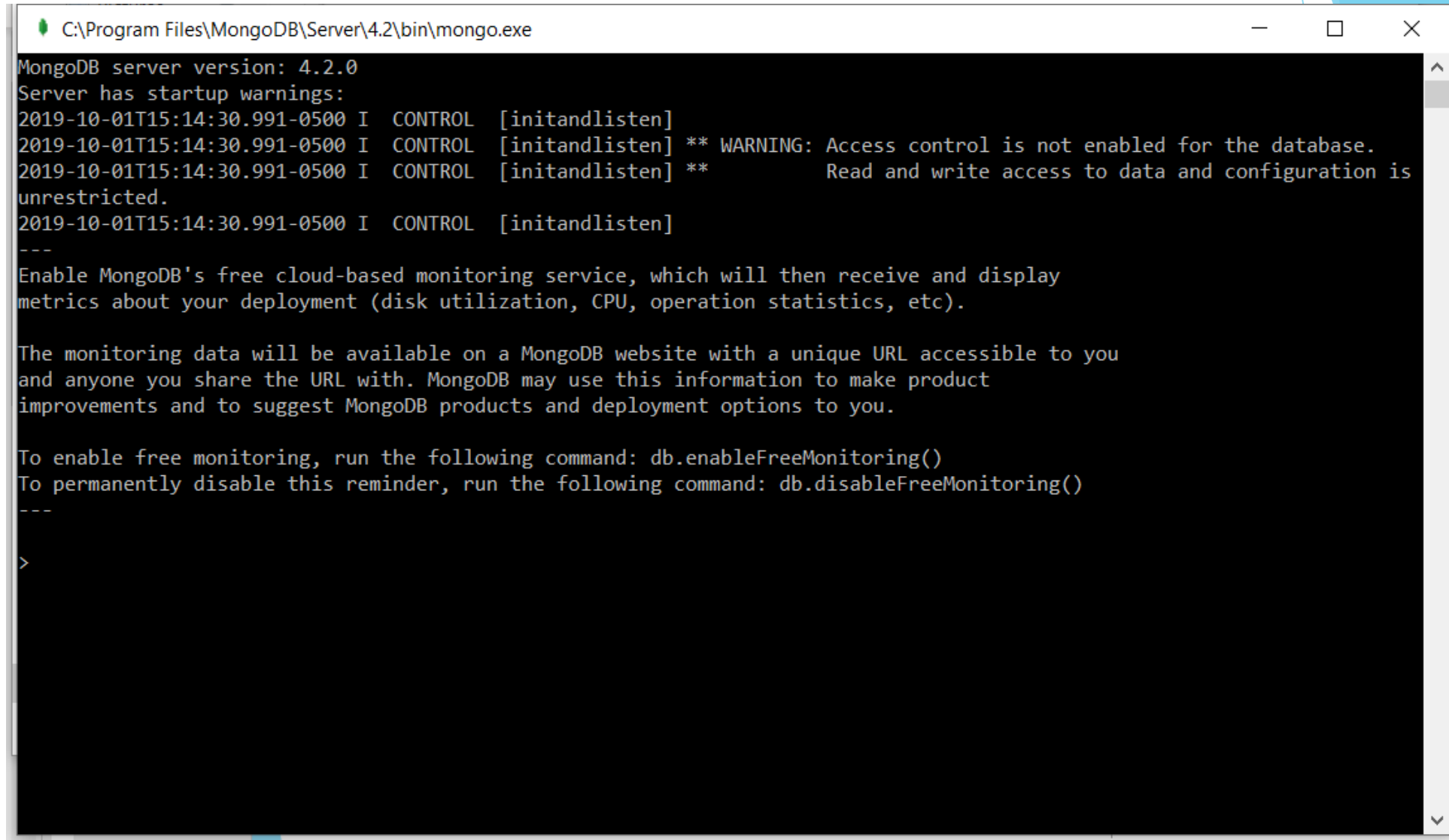
Ejecutar MongoDB en Windows



Instalación MongoDB en Windows

```
C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe
2017-12-19T14:32:36.623-0700 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      Read and write access to data and configuration is u
nrestricted.
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten]
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] ** WARNING: This server is bound to localhost.
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      Remote systems will be unable to connect to this ser
ver.
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      Start the server with --bind_ip <address> to specify
which IP
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      addresses it should serve responses from, or with --
bind_ip_all to
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      bind to all interfaces. If this behavior is desired,
start the
2017-12-19T14:32:36.624-0700 I CONTROL [initandlisten] **      server with --bind_ip 127.0.0.1 to disable this warn
ing.
2017-12-19T14:32:36.625-0700 I CONTROL [initandlisten]
2017-12-19T14:32:36.626-0700 I CONTROL [initandlisten]
2017-12-19T14:32:36.627-0700 I CONTROL [initandlisten] ** WARNING: The file system cache of this machine is configured
to be greater than 40% of the total memory. This can lead to increased memory pressure and poor performance.
2017-12-19T14:32:36.627-0700 I CONTROL [initandlisten] See http://dochub.mongodb.org/core/wt-windows-system-file-cache
2017-12-19T14:32:36.628-0700 I CONTROL [initandlisten]
2017-12-19T16:32:36.630-0500 I STORAGE [initandlisten] createCollection: admin.system.version with provided UUID: 11e56
004-1d3b-4d20-a3f6-67e11dbedda4
2017-12-19T16:32:36.644-0500 I COMMAND [initandlisten] setting featureCompatibilityVersion to 3.6
2017-12-19T16:32:36.653-0500 I STORAGE [initandlisten] createCollection: local.startup_log with generated UUID: 5571bd4
f-603d-4dea-a3fb-1f224961912c
2017-12-19T16:32:37.052-0500 I FTDC [initandlisten] Initializing full-time diagnostic data capture with directory 'C
:/data/db/diagnostic.data'
2017-12-19T16:32:37.057-0500 I NETWORK [initandlisten] waiting for connections on port 27017
```

Instalación MongoDB en Windows



```
C:\Program Files\MongoDB\Server\4.2\bin>mongo.exe

MongoDB server version: 4.2.0
Server has startup warnings:
2019-10-01T15:14:30.991-0500 I  CONTROL  [initandlisten]
2019-10-01T15:14:30.991-0500 I  CONTROL  [initandlisten] ** WARNING: Access control is not enabled for the database.
2019-10-01T15:14:30.991-0500 I  CONTROL  [initandlisten] **           Read and write access to data and configuration is
unrestricted.
2019-10-01T15:14:30.991-0500 I  CONTROL  [initandlisten]
---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---
>
```

Primeros comandos en MongoDB

Mostrar bdd

```
2017-12-19T14:43:53.8
> show dbs
admin      0.0000GB
config     0.0000GB
local      0.0000GB
>
```

Crear base de datos y mostrar colecciones

```
> use clasemongodb  
switched to db clasemongodb
```

```
{ "_id" : ObjectId("5d952144a1c79b2a8c2b1144"), "nombre" : "cindy" }  
> show collections  
Coleccion  
> _
```

Ver contenido

```
0.000000
> db.bookmarks.find();
{ "_id" : ObjectId("5a398be8c4d604cc6cf89fc3"), "id" : 1, "nombre" : "Cindy", "apellido" : "Lopez", "clase" : "MongoDB" }
>
```

Crear un registro

```
switched to db classmongo
> db.bookmarks.save({id:1, nombre: "Cindy", apellido: "Lopez", clase:"MongoDB"})
WriteResult({ "nInserted" : 1 })
>
```


Insertar documentos

```
frutas
> db.frutas.insert(<<nombre:'Fresa',color:'rojo',maduracion:true>>)
WriteResult(<< "nInserted" : 1 >>)
> db.frutas.find();
< "_id" : ObjectId("5995ac144203395df3c70a43"), "nombre" : "Naranja", "color" : "naranja" >
< "_id" : ObjectId("5995ad18c7d369ba40b6b8dc"), "nombre" : "Manzana", "color" : "Verde" >
< "_id" : ObjectId("5995ad36c7d369ba40b6b8dd"), "nombre" : "Manzana Roja", "color" : "Rojo" >
< "_id" : ObjectId("5995adb6c7d369ba40b6b8de"), "nombre" : "hola", "color" : 12 >
< "_id" : ObjectId("5995ae21b5c2a31565593028"), "nombre" : "Uva", "color" : "Violeta", "temporada" : false >
< "_id" : ObjectId("5995b13fb5c2a31565593029"), "nombre" : "Mango", "color" : "naranja" >
< "_id" : ObjectId("5995b46d82588f93f59904b2"), "nombre" : "Fresa", "color" : "rojo", "maduracion" : true >
> =
```

Listar y buscar elementos

```
db.frutas.find()

frutas 0.001sec.

/* 1 */
{
  "_id" : ObjectId("5995ac144203395df3c70a43"),
  "nombre" : "Naranja",
  "color" : "naranja"
}

/* 2 */
{
  "_id" : ObjectId("5995ad18c7d369ba40b6b8dc"),
  "nombre" : "Manzana",
  "color" : "Verde"
}

/* 3 */
{
```

Formato

```
> use curso_mongo
switched to db curso_mongo
> db.frutas.find();
{ "_id" : ObjectId("5995ac144203395df3c70a43"), "nombre" : "Naranja", "color" : "naranja" }
{ "_id" : ObjectId("5995ad18c7d369ba40b6b8dc"), "nombre" : "Manzana Especial", "color" : "Verdoso", "temporada" : "Alta", "pais" : "España", "provincia" : "Murcia" }
{ "_id" : ObjectId("5995ad36c7d369ba40b6b8dd"), "nombre" : "Manzana Roja", "color" : "Rojo" }
{ "_id" : ObjectId("5995adb6c7d369ba40b6b8de"), "nombre" : "hola", "color" : 12 }
{ "_id" : ObjectId("5995ae21b5c2a31565593028"), "nombre" : "Uva", "color" : "Violeta", "temporada" : false }
>
```

```
> db.frutas.find().pretty();
{
  "_id" : ObjectId("5995ac144203395df3c70a43"),
  "nombre" : "Naranja",
  "color" : "naranja"
}
```

Listar y buscar elementos

```
db.frutas.find({color:'Rojo'})
```

 frutas  0.029 sec.

```
/* 1 */  
{  
  "_id" : ObjectId("5995ad36c7d369ba40b6b8dd"),  
  "nombre" : "Manzana Roja",  
  "color" : "Rojo"  
}
```

Listar y buscar elementos

```
db.frutas.find({color:'naranja', nombre:'Mango'})
```

 frutas  0.011 sec.

```
/* 1 */  
{  
  "_id" : ObjectId("5995b13fb5c2a31565593029"),  
  "nombre" : "Mango",  
  "color" : "naranja"  
}
```

Borrar documentos

```
> db.frutas.remove({maduracion:true});  
WriteResult({ "nRemoved" : 1 })  
> =
```

```
db.frutas.remove({  
  _id: ObjectId("5995b13fb5c2a31565593029")  
});
```

Editar documentos

```
> db.frutas.update(<nombre:'Manzana'>, <nombre:'Manzana Verde'>)  
WriteResult(< "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 >)
```

```
db.frutas.update({nombre:'Manzana'}, {nombre: 'Manzana Verde'})
```

```
Updated 1 existing record(s) in 4ms
```


Editar y crear nuevos campos

```
db.frutas.update({
  nombre: 'Manzana Especial'
}, {
  $set: {
    pais: 'España',
    provincia: 'Murcia'
  }
})
```

0.002 sec.

Updated 1 existing record(s) in 2ms

```
db.getCollection('frutas').find({})
```

frutas 0.001 sec.

```
/* 1 */
{
  "_id" : ObjectId("5995ac144203395df3c70a43"),
  "nombre" : "Naranja",
  "color" : "naranja"
}

/* 2 */
{
  "_id" : ObjectId("5995ad18c7d369ba40b6b8dc"),
  "nombre" : "Manzana Especial",
  "color" : "Verdoso",
  "temporada" : "Alta",
  "pais" : "España",
  "provincia" : "Murcia"
}

/* 3 */
{
  "_id" : ObjectId("5995ad36c7d369ba40b6b8dd"),
  "nombre" : "Manzana Roja",
  "color" : "Rojo"
}

/* 4 */
{
  "_id" : ObjectId("5995adb6c7d369ba40b6b8de"),
  "nombre" : "hola",
  "color" : 12.0
}
```


Borrar base de datos

```
> db.dropDatabase()
{ "dropped" : "base_de_datos_probando", "ok" : 1 }
>
```

Ejercicio

- ▶ Crear una colección de videos
- ▶ Cada video tiene los siguientes atributos
 - ▶ Título
 - ▶ Archivo de video asignado
 - ▶ Descripción
 - ▶ Campo de palabras claves
 - ▶ Comentarios

