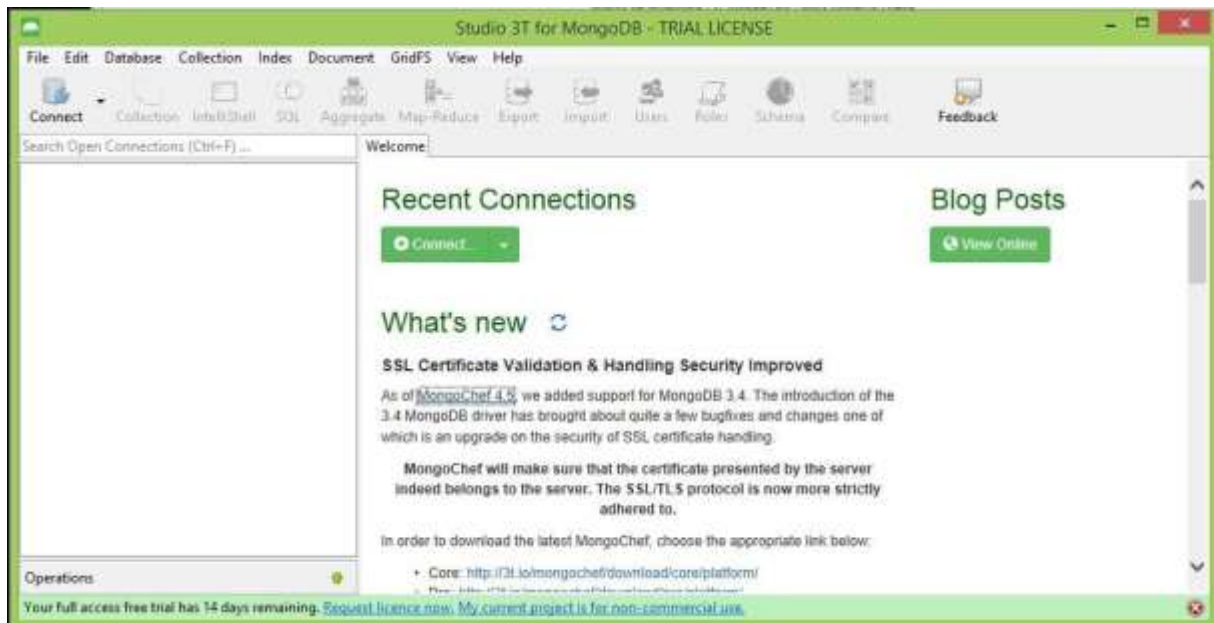


Practical-2 NoSQL

1. Installing Mongo shell.

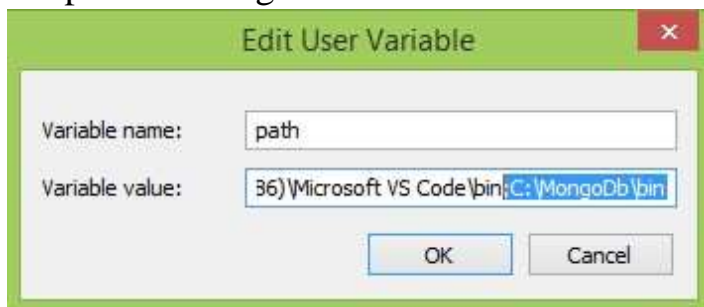
Download MongoChef by using link: <https://studio3t.com/download-thank-you/?OS=win64>

After completion of installation of MongoChef, when you launch it, it's first interface looks like as below.

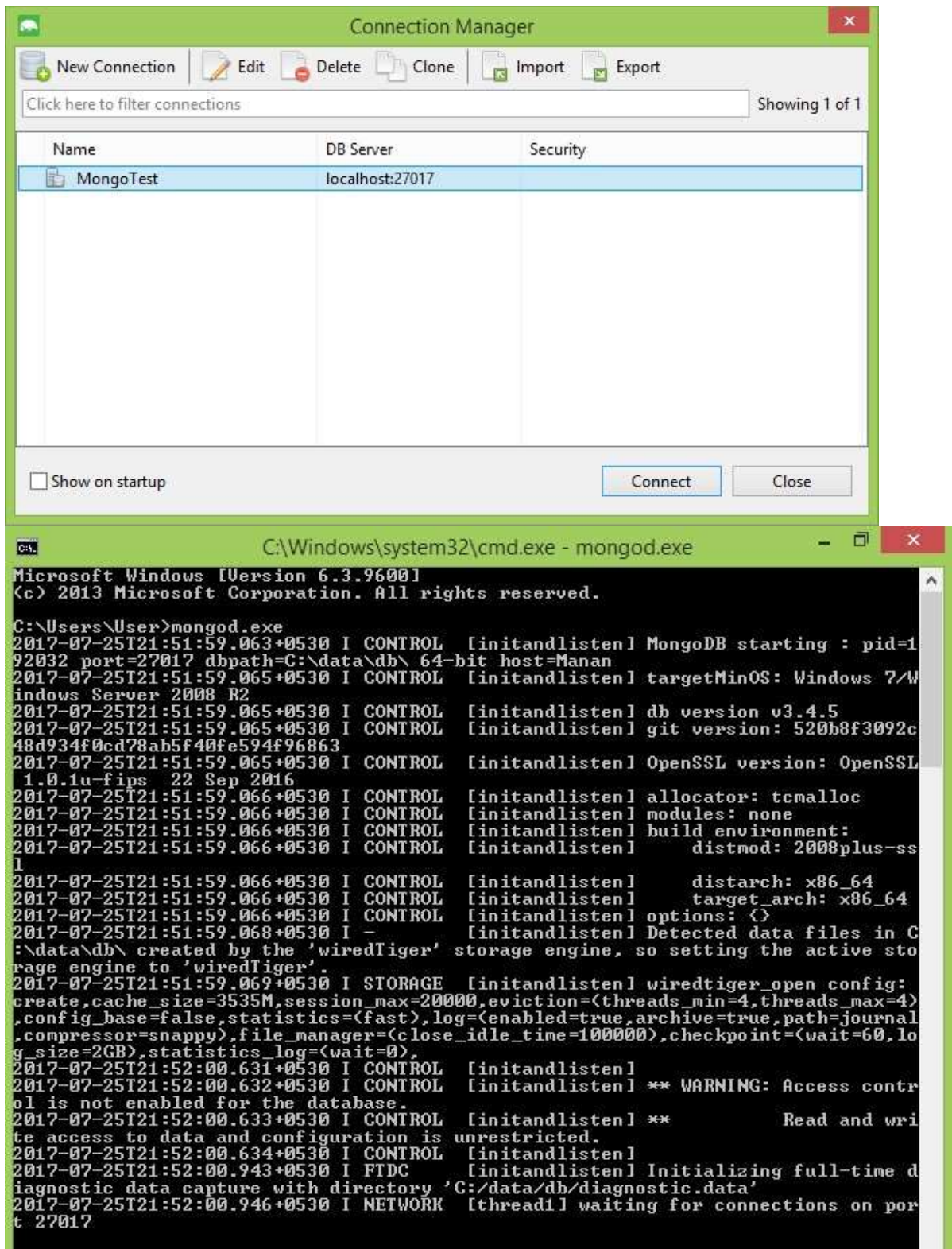


Open terminal and execute `mongod.exe` command, to make background daemon wait to establish connection.

Set path of MongoDB in environment variable as:



Practical-2 NoSQL

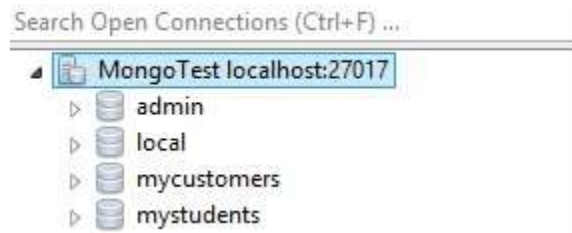


In MongoChef click on Connect, then click on New Connection. Give name of connection and click on save.

Select your connection and click on connect.

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It will display all the collections under connection.



Click on IntelliShell. In that shell we can execute our executable statement or script.

COMMANDS

1. CREATE USER

```
db.createUser({ user:
    "Patel",
    pwd: "123",
    roles:[{role: "userAdminAnyDatabase" , db:"admin"}]
})
```

Practical-2 NoSQL

```
> db.createUser({ user: "Patel",
...   pwd: "123",
...   roles:[{role: "userAdminAnyDatabase" , db:"admin"}]
... })
Successfully added user: {
  "user" : "Patel",
  "roles" : [
    {
      "role" : "userAdminAnyDatabase",
      "db" : "admin"
    }
  ]
}
```

2. CREATE DATABASE

Use emp

```
> use emp
switched to db emp
>
```

3. CREATE COLLECTION

db.createCollection("emp")

```
> db.createCollection("emp")
{ "ok" : 1 }
>
```

4. INSERT DATA INTO DATABASE

- db.emp.insert({"empid" : 1, "empnam" : "Dhoni"})
- db.emp.insert({"empid" : 2, "empname" : "Kholi"})

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- `db.emp.insert({"empid" : 3, "empname" : "Sachin" , "age" : 23})`
- `var myemp=[{"empid" : 4, "empname" : "smith"}, {"empid" : 4,"empname" : "john"}];`
`db.emp.insert(myemp)`

```
Administrator: C:\Windows\System32\cmd.exe - mongo
> db.emp.insert( {"empid" : 1, "empnam" : "Dhoni"})
WriteResult({ "nInserted" : 1 })
> db.emp.insert( {"empid" : 2, "empname" : "Kholi"})
WriteResult({ "nInserted" : 1 })
> db.emp.insert( {"empid" : 3, "empname" : "Sachin" , "age" : 23})
uncaught exception: SyntaxError: illegal character :
@(shell):1:52
> db.emp.insert( {"empid" : 3, "empname" : "Sachin" , "age" : 23})
WriteResult({ "nInserted" : 1 })
> var myemp=[ {"empid" : 4, "empname" : "smith"}, {"empid" :
... 4,"empname" : "john"} ];
> db.emp.insert(myemp)
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 2,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>
>
```

5. UPDATE AND DELETE DATA

- `db.emp.update({"empid" :1},{ $set:{"empname" : "Patel"}}) □`
`db.emp.update({"empid" :1},{ $set:{age:50}})`

Practical-2 NoSQL

```
>
> db.emp.update({"empid" :1},{ $set:{"empname" : "Patel"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.emp.update({"empid" :1},{ $set:{age:50}})
...
...
>
> db.emp.update({"empid" :1},{ $set:{age:50}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> _
```

- □ remove particular field:
- `db.emp.update({"empid" :1},{ $unset:{age:40}})`
- update value of age by 5:
`db.emp.update({"empid" :1},{ $inc:{age:5}})`
- removing whole document `db.emp.remove({empid:3})`
- If no document matching with particular condition exists, then if we set upsert “true”, then initially it will also create it.

```
> db.emp.update({"empid" :1},{ $unset:{age:40}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.emp.update({"empid" :1},{ $inc:{age:5}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.emp.remove({empid:3})
WriteResult({ "nRemoved" : 1 })
> _
```

```
db.emp.update({empid:3},{empid:5,empname:"Patel"},{upsert:true
});
```

Practical-2 NoSQL

```
> db.emp.update({empid:3},{empid:5,empname:"Patel"},{upsert:true
... });
WriteResult({
  "nMatched" : 0,
  "nUpserted" : 1,
  "nModified" : 0,
  "_id" : ObjectId("622418dd6d73fb91e6b5849e")
})
> _
```

- **Renaming any particular field**
db.emp.update({empid:4},{ \$rename: {"empname": "nameemp" }});

```
> db.emp.update({empid:4},{ $rename: {"empname": "nameemp" }});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> _
```

6. RETRIVAL OF DATA

- **db.emp.find().forEach(printjson)**

Practical-2 NoSQL

```
> db.emp.find().forEach(printjson)
{
  "_id" : ObjectId("62241696c4aba460b7903c08"),
  "empid" : 1,
  "empnam" : "Dhoni",
  "empname" : "Patel",
  "age" : 5
}
{
  "_id" : ObjectId("622416a4c4aba460b7903c09"),
  "empid" : 2,
  "empname" : "Kholi"
}
{
  "_id" : ObjectId("62241701c4aba460b7903c0b"),
  "empid" : 4,
  "nameemp" : "smith"
}
{
  "_id" : ObjectId("62241701c4aba460b7903c0c"),
  "empid" : 4,
  "empname" : "john"
}
{
  "_id" : ObjectId("622418dd6d73fb91e6b5849e"),
  "empid" : 5,
  "empname" : "Patel"
}
> _
```

- `db.emp.find().pretty()`

Practical-2 NoSQL

```
> db.emp.find().pretty()
{
  "_id" : ObjectId("62241696c4aba460b7903c08"),
  "empid" : 1,
  "empnam" : "Dhoni",
  "empname" : "Patel",
  "age" : 5
}
{
  "_id" : ObjectId("622416a4c4aba460b7903c09"),
  "empid" : 2,
  "empname" : "Kholi"
}
{
  "_id" : ObjectId("62241701c4aba460b7903c0b"),
  "empid" : 4,
  "nameemp" : "smith"
}
{
  "_id" : ObjectId("62241701c4aba460b7903c0c"),
  "empid" : 4,
  "empname" : "john"
}
{
  "_id" : ObjectId("622418dd6d73fb91e6b5849e"),
  "empid" : 5,
  "empname" : "Patel"
}
>
```

- **db.emp.find({ })**
- **db.emp.find({empname : "smith"}).forEach(printjson)**

Practical-2 NoSQL

```
> db.emp.find({nameemp : "smith"}).forEach(printjson)
{
  "_id" : ObjectId("62241701c4aba460b7903c0b"),
  "empid" : 4,
  "nameemp" : "smith"
}
> _
```

- **db.emp.find({empid : {\$gt:2}})**

```
> db.emp.find({empid : {$gt:2}})
{ "_id" : ObjectId("62241701c4aba460b7903c0b"), "empid" : 4, "nameemp" : "smith" }
{ "_id" : ObjectId("62241701c4aba460b7903c0c"), "empid" : 4, "empname" : "john" }
{ "_id" : ObjectId("622418dd6d73fb91e6b5849e"), "empid" : 5, "empname" : "Patel" }
```

```
var myemp=db.emp.find( { empid : {$gt:2}})
while(myemp.hasNext()){ print(tojson(myemp.next()));
}
```

```
> var myemp=db.emp.find( { empid : {$gt:2}});while(myemp.hasNext()){ print(tojson(myemp.next())); }
{
  "_id" : ObjectId("62241701c4aba460b7903c0b"),
  "empid" : 4,
  "nameemp" : "smith"
}
{
  "_id" : ObjectId("62241701c4aba460b7903c0c"),
  "empid" : 4,
  "empname" : "john"
}
{
  "_id" : ObjectId("622418dd6d73fb91e6b5849e"),
  "empid" : 5,
  "empname" : "Patel"
}
>
```

7. DISPLAY DATABASE show dbs

Practical-2 NoSQL

```
> show dbs
admin    0.000GB
config  0.000GB
emp      0.000GB
local    0.000GB
vandan   0.000GB
> █
```