

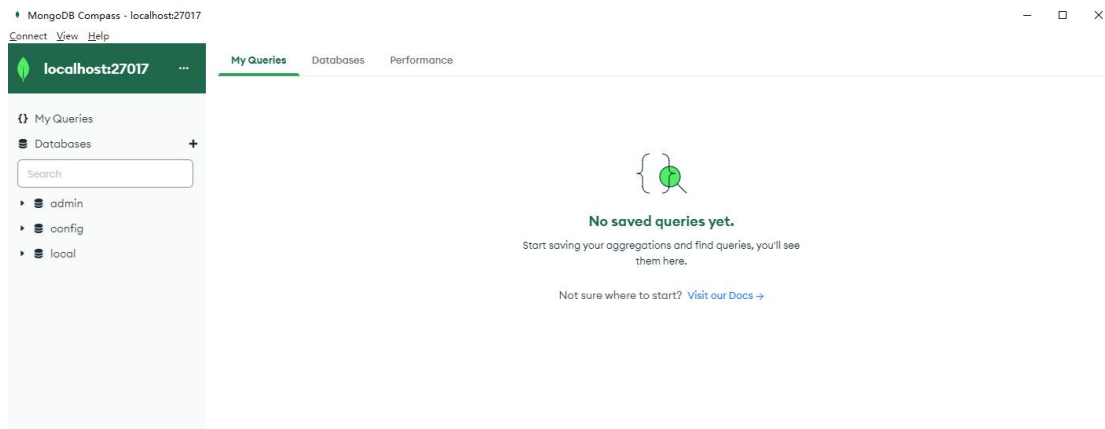
程设第十四次作业

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选择使用 **MongoDB** 完成任务

任务一：通过账户和密码连接数据库

打开 **MongoDB Compass**



设置账号和密码

初始 user 为空

```
> db.system.users.find()
<
admin>
```

依次创建 root 用户、管理用户和普通用户（对课堂上的 student 数据库）

```
> db.system.users.find()
< { _id: 'admin.LF',
  userId: UUID("db6f9250-efbc-4b98-becc-2073017fe89e"),
  user: 'LF',
  db: 'admin',
  credentials:
    { 'SCRAM-SHA-1':
      { iterationCount: 10000,
        salt: 'ltb1vIZXfXTj4XteXok69w==',
        storedKey: 'bYyQ/5JnJL3bf5C23QUqE4aefUA=',
        serverKey: 'E1wbGP1XhWw21GtYPpTT+5w4CW4=' },
      'SCRAM-SHA-256':
      { iterationCount: 15000,
        salt: 'v4oMZj/gQxk7fZI3X60cQdePT2z86RIQSaLJyw==',
        storedKey: 'rS8axptqFO0hqGyPjFv8Q2m/TXHP47+w9rWG7l67dE=',
        serverKey: 'WmG2EeRGc/j58enaBc6oqXJ6rs46xtnNVDeEnMb99Zk=' } },
  roles: [ { role: 'root', db: 'admin' } ] }
> db.createUser({ user: "admin", pwd: "123456", roles: [{ role: "userAdminAnyDatabase", db: "admin" }] })
< { ok: 1 }
> use student
< 'switched to db student'
> db.createUser({ user: "user1", pwd: "123456", roles: [{ role: "dbOwner", db: "student" }] })
< { ok: 1 }
```

在 mongo 配置文件加入如下语句启动授权

security:

authorization: enabled

再次跑课堂上的 mongo 代码

```
PS E:\code\py_code> python -u "c:\Users\LF\Desktop\week15\week15\mongo.py"
Traceback (most recent call last):
  File "c:\Users\LF\Desktop\week15\week15\mongo.py", line 3, in <module>
    dblist = myclient.list_database_names()
  File "E:\py\lib\site-packages\pymongo\mongo_client.py", line 1867, in list_database_names
    return [doc["name"] for doc in self.list_databases(session, nameOnly=True, comment=comment)]
  File "E:\py\lib\site-packages\pymongo\mongo_client.py", line 1840, in list_databases
    res = admin._retryable_read_command(cmd, session=session)
  File "E:\py\lib\site-packages\pymongo\database.py", line 849, in _retryable_read_command
    return self._client._retryable_read(cmd, read_preference, session)
  File "E:\py\lib\site-packages\pymongo\csot.py", line 105, in csot_wrapper
    return func(self, *args, **kwargs)
  File "E:\py\lib\site-packages\pymongo\mongo_client.py", line 1448, in _retryable_read
    return func(session, server, sock_info, read_pref)
  File "E:\py\lib\site-packages\pymongo\database.py", line 837, in _cmd
    return self._command(
  File "E:\py\lib\site-packages\pymongo\database.py", line 688, in _command
    return sock_info.command(
  File "E:\py\lib\site-packages\pymongo\pool.py", line 767, in command
    return command(
  File "E:\py\lib\site-packages\pymongo\network.py", line 166, in command
    helpers._check_command_response(
  File "E:\py\lib\site-packages\pymongo\helpers.py", line 181, in _check_command_response
    raise OperationFailure(errmsg, code, response, max_wire_version)
pymongo.errors.OperationFailure: command listDatabases requires authentication, full error: {'ok': 0.0, 'errmsg': 'command listDatabases requires authentication', 'code': 13, 'codeName': 'Unauthorized'}
PS E:\code\py_code>
```

添加账号密码信息后再次运行

```
C:\Users\LF\Desktop\week15\week15> mongo.py > ...
1  import pymongo
2  myclient = pymongo.MongoClient("mongodb://LF:localhost:27017/?authMechanism=DEFAULT")
3  dblist = myclient.list_database_names()
4  for db in dblist:
5      print(db)
6  mydb = myclient["student"]
7  mycol = mydb["comments"]
8  myclient.close()

问题 输出 终端 调试控制台
PS E:\code\py_code> python -u "c:\Users\LF\Desktop\week15\week15\mongo.py"
Test_for_cs
admin
config
local
student
PS E:\code\py_code>
```

账号密码配置成功！

任务二：处理爬虫系统的数据并保存至数据库

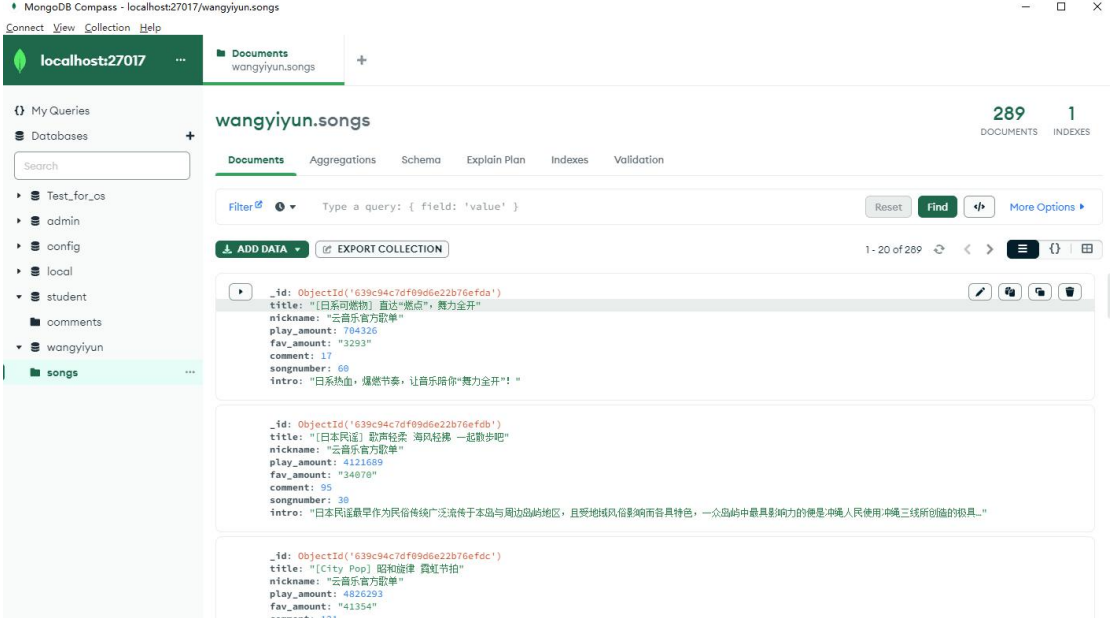
在 week14 爬虫的基础上添加

```
texts=[]
for list in inf:
    dic={}
    col = ['title','nickname','play_amount','fav_amount','comment','songnumber','intro']
    for i in range(len(col)):
        dic[col[i]] = list[i]
    texts.append(dic)
print('load %d lines' % len(texts))
client = pymongo.MongoClient('localhost:27017/?authMechanism=DEFAULT')
db=client.wangyiyun
collection=db.songs
result=collection.insert_many(texts)
print(result)
client.close()
```

输出结果

```
load 289 lines
<pymongo.results.InsertManyResult object at 0x0000026578AAD960>
PS E:\code\py_code>
```

在数据库中查看



连接成功！