



Connection established b/w python & MongoDB

database(sunnydatabase) & collection(channels) created

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["channels"]
7 # create documents in collection channels
8 doc=[{'channel_id':'1','channel_name':"ALRATV",'channel_description':'Spiritual content'},
9       {'channel_id':'2','channel_name':"ALRATV",'channel_description':'Spiritual content'},
10      {'channel_id':'3','channel_name':"ALRATV",'channel_description':'Spiritual content'},
11      {'channel_id':'4','channel_name':"ALRATV",'channel_description':'Spiritual content'},
12      {'channel_id':'5','channel_name':"ALRATV",'channel_description':'Spiritual content'},
13      {'channel_id':'6','channel_name':"ALRATV",'channel_description':'Spiritual content'},
14      {'channel_id':'7','channel_name':"ALRATV",'channel_description':'Spiritual content'},
15      {'channel_id':'8','channel_name':"ALRATV",'channel_description':'Spiritual content'},
16      {'channel_id':'9','channel_name':"ALRATV",'channel_description':'Spiritual content'},
17      {'channel_id':'10','channel_name':"ALRATV",'channel_description':'Spiritual content'}]
18 ]
19 # insert documents into collection channels
20 res=mycollection.insert_many(doc)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py  
PS C:\Users\Admin\Desktop\python with Mysql\demo>

Connect Edit View Collection Help

localhost:2...

My Queries

Performance

Databases

Search

DBMongo

admin

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mydatabase

mydb

pythondb1

pythondb2

My Queries Databases sunnydatabase channels

sunnydatabase.channels

Documents

Aggregations

Schema

Indexes

Validation

Filter Type a query: { field: 'value' } or Explain

ADD DATA

EXPORT DATA

channel\_description: "Spiritual content"

\_id: ObjectId('66555d73eaa678b1db200439')  
channel\_id: "7"  
channel\_name: "ALRATV"  
channel\_description: "Spiritual content"

\_id: ObjectId('66555d73eaa678b1db20043a')  
channel\_id: "8"  
channel\_name: "ALRATV"  
channel\_description: "Spiritual content"

\_id: ObjectId('66555d73eaa678b1db20043b')  
channel\_id: "9"  
channel\_name: "ALRATV"  
channel\_description: "Spiritual content"

\_id: ObjectId('66555d73eaa678b1db20043c')  
channel\_id: "10"  
channel\_name: "ALRATV"  
channel\_description: "Spiritual content"

## Collection(videos) created and documents inserted into it

```
pythonMongodb.py X pythonmongoconnect.py
pythonMongodb.py > ...
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["videos"]
7 # create documents in collection channels
8 doc=[{'video_id':101,'video_title':"Introduction", 'video_description':'welc
9       {'video_id':102,'video_title':"Tech Reviews", 'video_description':'late
10      {'video_id':103,'video_title':"Pasta Recipe", 'video_description':'make
11      {'video_id':104,'video_title':"Gamers Odyssey: Quests and Challenges",
12      {'video_id':105,'video_title':"Crafty Creations Unleashed", 'video_desc
13      {'video_id':106,'video_title':"CHRONOS: Epic Orchestral Music", 'video_
14      {'video_id':107,'video_title':"Tech Trends 2024: Predictions and Insign
15      {'video_id':108,'video_title':"Lets Learn Science with Dr. Smith", 'vid
16      {'video_id':109,'video_title':"Pop Culture Quest", 'video_description':
17      {'video_id':110,'video_title':"Bihe Pass Nepali movie", 'video_descript
18      ]
19 # insert documents into collection channels
20 res=mycollection.insert_many(doc)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

PS C:\Users\Admin\Desktop\python with Mysql\demo>

MongoDB Compass - localhost:27017/sunnydatabase.videos

Connect Edit View Collection Help

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My Queries

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sundb

sunnydatabase

channels

videos

## sunnydatabase.videos

Documents

Aggregations

Schema

Indexes

Validation

Filter

Type a query: { field: 'value' } or {

Explain

Res

ADD DATA

EXPORT DATA

1 - 10 of 10

```
_id: ObjectId('665561147f4058c19119b5bb')
video_id: 106
video_title: "CHRONOS: Epic Orchestral Music"
video_description: "Dive into the timeless realm of CHRONOS"
channel_id: 6
```

```
_id: ObjectId('665561147f4058c19119b5bc')
video_id: 107
video_title: "Tech Trends 2024: Predictions and Insights"
video_description: "Buckle up for a glimpse into the future!"
channel_id: 7
```

```
_id: ObjectId('665561147f4058c19119b5bd')
video_id: 108
video_title: "Lets Learn Science with Dr. Smith"
video_description: "Explore science"
channel_id: 8
```

```
_id: ObjectId('665561147f4058c19119b5be')
video_id: 109
video_title: "Pop Culture Quest"
video_description: "Embark on a quest with us"
channel_id: 9
```

```
_id: ObjectId('665561147f4058c19119b5bf')
video_id: 110
video_title: "Bihe Pass Nepali movie"
video_description: "Bihe Pass Full Movie review"
channel_id: 10
```



## Collection(playlists) created and documents inserted into it

3

```
pythonMongodb.py X pythonmongoconnect.py
pythonMongodb.py > ...
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["playlists"]
7 # create documents in collection channels
8 doc=[{'playlist_id':201,'playlist_name':"Ramadan 2024", 'channel_id':1},
9       {'playlist_id':202,'playlist_name':"Cinematic Sensations", 'channel_id':2},
10      {'playlist_id':203,'playlist_name':"Popcorn Picks", 'channel_id':3},
11      {'playlist_id':204,'playlist_name':"Movie Magic Marathon", 'channel_id':4},
12      {'playlist_id':205,'playlist_name':"Film Fanatic Flicks", 'channel_id':5},
13      {'playlist_id':206,'playlist_name':"Silver Screen Gems", 'channel_id':6},
14      {'playlist_id':207,'playlist_name':"Blockbuster Binge", 'channel_id':7},
15      {'playlist_id':208,'playlist_name':"Cinephile Classics", 'channel_id':8},
16      {'playlist_id':209,'playlist_name':"Reel Reviews", 'channel_id':9},
17      {'playlist_id':210,'playlist_name':"Hollywood Hits Hub", 'channel_id':10}
18 ]
19 # insert documents into collection channels
20 res=mycollection.insert_many(doc)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

```
● PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
○ PS C:\Users\Admin\Desktop\python with Mysql\demo> 
```

localhost:2...

My Queries Performance Databases Search

admin company config crud crud\_app demo2 demo4 demo5 hill humans local mydatabase mydb pythondb1 pythondb2 student\_details sundb **sunnydatabase** channels **playlists** videos todoappdb

### sunnydatabase.playlists

Documents Aggregations Schema Indexes

Filter Type a query: { field: 'value' } or

ADD DATA EXPORT DATA

\_id: ObjectId('6655642efa7f7b68575168b7')  
playlist\_id: 205  
playlist\_name: "Film Fanatic Flicks"  
channel\_id: 5

\_id: ObjectId('6655642efa7f7b68575168b8')  
playlist\_id: 206  
playlist\_name: "Silver Screen Gems"  
channel\_id: 6

\_id: ObjectId('6655642efa7f7b68575168b9')  
playlist\_id: 207  
playlist\_name: "Blockbuster Binge"  
channel\_id: 7

\_id: ObjectId('6655642efa7f7b68575168ba')  
playlist\_id: 208  
playlist\_name: "Cinephile Classics"  
channel\_id: 8

\_id: ObjectId('6655642efa7f7b68575168bb')  
playlist\_id: 209  
playlist\_name: "Reel Reviews"  
channel\_id: 9

\_id: ObjectId('6655642efa7f7b68575168bc')  
playlist\_id: 210  
playlist\_name: "Hollywood Hits Hub"  
channel\_id: 10

**Collection(comments) created and documents inserted into it.**

```
pythonMongodb.py > ...
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["comments"]
7 # create documents in collection channels
8 doc=[{'comment_id':301,'comment_text':"Excellent", 'video_id':101},
9      {'comment_id':302,'comment_text':"Very Good", 'video_id':102},
10     {'comment_id':303,'comment_text':"Fair", 'video_id':103},
11     {'comment_id':304,'comment_text':"Good", 'video_id':104},
12     {'comment_id':305,'comment_text':"Not Good", 'video_id':105},
13     {'comment_id':306,'comment_text':"Bad", 'video_id':106},
14     {'comment_id':307,'comment_text':"Awesome", 'video_id':107},
15     {'comment_id':308,'comment_text':"Very Bad", 'video_id':108},
16     {'comment_id':309,'comment_text':"Good", 'video_id':109},
17     {'comment_id':310,'comment_text':"Good", 'video_id':110}
18 ]
19 # insert documents into collection channels
20 res=mycollection.insert_many(doc)
```

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** PORTS SQL CONSOLE

```
● PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
○ PS C:\Users\Admin\Desktop\python with Mysql\demo> 
```

MongoDB Compass - localhost:27017/sunnydatabase.comments

Connect Edit View Collection Help

localhost:2...

My Queries Databases sunnydatabase

My Queries

Performance

Databases

Search

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- crud\_app
- demo2
- demo4
- demo5
- hill
- humans
- local
- mydatabase
- mydb
- pythondb1
- pythondb2
- student\_details
- sundb
- sunnydatabase**
  - channels
  - comments**
  - playlists
  - videos

sunnydatabase.comments

Documents

Aggregations

Schema

Indexes

Validation

Filter



Type a query: { field: 'value' } or {

ADD DATA

EXPORT DATA



\_id: ObjectId('665565e5464024b516862e68')  
comment\_id: 305  
comment\_text: "Not Good"  
video\_id: 105

\_id: ObjectId('665565e5464024b516862e69')  
comment\_id: 306  
comment\_text: "Bad"  
video\_id: 106

\_id: ObjectId('665565e5464024b516862e6a')  
comment\_id: 307  
comment\_text: "Awesome"  
video\_id: 107

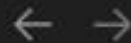
\_id: ObjectId('665565e5464024b516862e6b')  
comment\_id: 308  
comment\_text: "Very Bad"  
video\_id: 108

\_id: ObjectId('665565e5464024b516862e6c')  
comment\_id: 309  
comment\_text: "Good"  
video\_id: 109

\_id: ObjectId('665565e5464024b516862e6d')  
comment\_id: 310  
comment\_text: "Good"  
video\_id: 110



Go Run ...



demo

pythonMongodb.py X

pythonmongoconnect.py

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pythonMongodb.py > ...

Count of rows of collection "channels"

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["channels"]
7 # Count the documents in the collection
8 doc_count = mycollection.count_documents({})
9
10 print(f"Total documents in '{mycollection}': {doc_count}")
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

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PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

Total documents in 'Collection(Database(MongoClient(host=['127.0.0.1:27017'], document\_class='channels'))': 10

Go Run ...



demo

pythonMongodb.py X

pythonmongoconnect.py

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pythonMongodb.py > ... Count of rows of collection "videos"

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["videos"]
7 # Count the documents in the collection
8 doc_count = mycollection.count_documents({})
9
10 print(f"Total documents in '{mycollection}': {doc_count}")
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

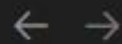
TERMINAL

PORTS

SQL CONSOLE

```
PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
Total documents in 'Collection(Database(MongoClient(host=['127.0.0.1:27017'], document_class=dict,
'videos'))': 10
PS C:\Users\Admin\Desktop\python with Mysql\demo> 
```

View Go Run ...



demo

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pythonMongodb.py X

pythonmongoconnect.py

pythonMongodb.py > ...

Count of rows of collection "playlists"

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["playlists"]
7 # Count the documents in the collection
8 doc_count = mycollection.count_documents({})
9
10 print(f"Total documents in '{mycollection}': {doc_count}")
```

PROBLEMS

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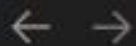
PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

Total documents in 'Collection(Database(MongoClient(host=['127.0.0.1:27017'], document\_class=dict, 'playlists'))': 10

PS C:\Users\Admin\Desktop\python with Mysql\demo>



Go Run ...



demo

pythonMongodb.py X

pythonmongoconnect.py



pythonMongodb.py > ...

Count of rows of collection "comments"

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["comments"]
7 # Count the documents in the collection
8 doc_count = mycollection.count_documents({})
9
10 print(f"Total documents in '{mycollection}': {doc_count}")
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SQL CONSOLE

PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

Total documents in 'Collection(Database(MongoClient(host=['127.0.0.1:27017'], document\_cl  
'comments'))': 10



pythonMongodb.py ✕

pythonmongoconnect.py

pythonMongodb.py > ...

### 3 documents (rows) from collection "channels"

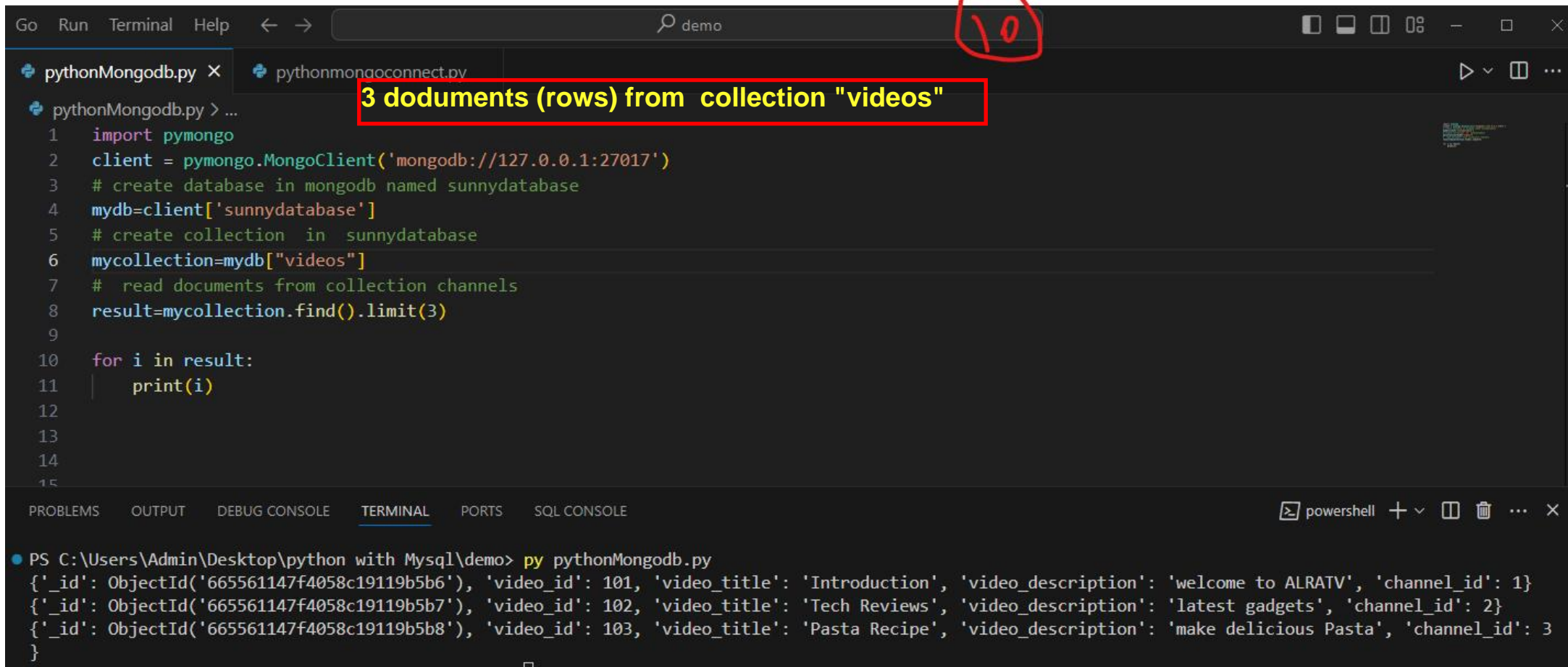
```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["channels"]
7 # read documents from collection channels
8 result=mycollection.find().limit(3)
9
10 for i in result:
11     print(i)
```

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** PORTS SQL CONSOLE

 powershell     ... 

```
PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
```

```
{ '_id': ObjectId('66555d73eaa678b1db200433'), 'channel_id': '1', 'channel_name': 'ALRATV', 'channel_description': 'Spiritual content' }
{ '_id': ObjectId('66555d73eaa678b1db200434'), 'channel_id': '2', 'channel_name': 'TechExplode', 'channel_description': 'Explore world of technology' }
{ '_id': ObjectId('66555d73eaa678b1db200435'), 'channel_id': '3', 'channel_name': 'CookingFusion', 'channel_description': 'where cooking meets creativity' }
```



Go Run Terminal Help demo

pythonMongodb.py × pythonmongoconnect.py

pythonMongodb.py > ...

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["videos"]
7 # read documents from collection channels
8 result=mycollection.find().limit(3)
9
10 for i in result:
11     print(i)
```

3 documents (rows) from collection "videos"

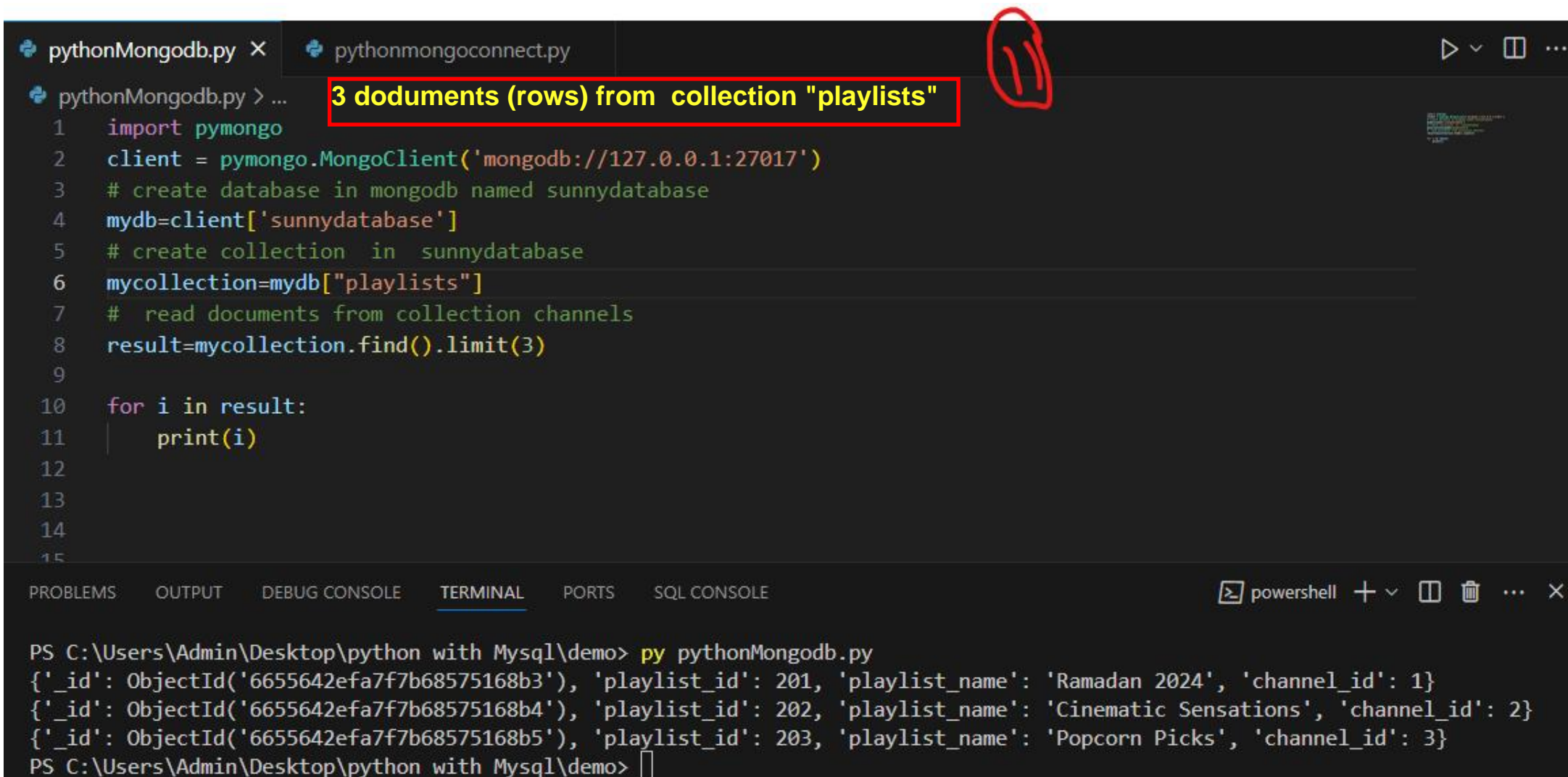
10

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

```
{'_id': ObjectId('665561147f4058c19119b5b6'), 'video_id': 101, 'video_title': 'Introduction', 'video_description': 'welcome to ALRATV', 'channel_id': 1}
{'_id': ObjectId('665561147f4058c19119b5b7'), 'video_id': 102, 'video_title': 'Tech Reviews', 'video_description': 'latest gadgets', 'channel_id': 2}
{'_id': ObjectId('665561147f4058c19119b5b8'), 'video_id': 103, 'video_title': 'Pasta Recipe', 'video_description': 'make delicious Pasta', 'channel_id': 3}
```





```
pythonMongodb.py × pythonmongoconnect.py
pythonMongodb.py > ...
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["playlists"]
7 # read documents from collection channels
8 result=mycollection.find().limit(3)
9
10 for i in result:
11     print(i)
12
13
14
15
```

3 documents (rows) from collection "playlists"

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py

```
{'_id': ObjectId('6655642efa7f7b68575168b3'), 'playlist_id': 201, 'playlist_name': 'Ramadan 2024', 'channel_id': 1}
{'_id': ObjectId('6655642efa7f7b68575168b4'), 'playlist_id': 202, 'playlist_name': 'Cinematic Sensations', 'channel_id': 2}
{'_id': ObjectId('6655642efa7f7b68575168b5'), 'playlist_id': 203, 'playlist_name': 'Popcorn Picks', 'channel_id': 3}
```

PS C:\Users\Admin\Desktop\python with Mysql\demo>

Go ... demo

pythonMongodb.py × pythonmongoconnect.py

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pythonMongodb.py > ... 3 documents (rows) from collection "comments"

```
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 # create database in mongodb named sunnydatabase
4 mydb=client['sunnydatabase']
5 # create collection in sunnydatabase
6 mycollection=mydb["comments"]
7 # read documents from collection channels
8 result=mycollection.find().limit(3)
9
10 for i in result:
11     print(i)
12
13
14
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

powershell + - X

```
PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
{'_id': ObjectId('665565e5464024b516862e64'), 'comment_id': 301, 'comment_text': 'Excellent', 'video_id': 101}
{'_id': ObjectId('665565e5464024b516862e65'), 'comment_id': 302, 'comment_text': 'Very Good', 'video_id': 102}
{'_id': ObjectId('665565e5464024b516862e66'), 'comment_id': 303, 'comment_text': 'Fair', 'video_id': 103}
PS C:\Users\Admin\Desktop\python with Mysql\demo> 
```



13 Join

## Full Join b/w tables "videos" & "comments"

```
pythonMongodb.py > ...
1 import pymongo
2 client = pymongo.MongoClient('mongodb://127.0.0.1:27017')
3 mydb = client['sunnydatabase']
4 mycollection = mydb["videos"]
5 pipeline = [
6     {
7         "$lookup": {
8             "from": "comments", # name of the other collection
9             "localField": "video_id",
10            "foreignField": "video_id",
11            "as": "joined_data"
12        }
13    },
14    {
15        "$unwind": "$joined_data"
16    },
17    {
18        "$project": {
19            "_id": 0,
20            "comment_text": "$joined_data.comment_text",
21            "video_title": "$video_title", # 'video_title' is a field in the 'videos' collection
22            "video_description": "$video_description" # 'video_description' is a field in the 'videos' collection
23        }
24    }
25 ]
26 result = list(mycollection.aggregate(pipeline))
27 print(result)
28
```

14

## Inner join

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE
PS C:\Users\Admin\Desktop\python with Mysql\demo> py pythonMongodb.py
[{'playlist_name': 'Ramadan 2024', 'video_title': 'Introduction', 'video_description': 'welcome to ALRATV'}, {'playlist_name': 'Cinematic Sensations', 'video_title': 'Tech Review s', 'video_description': 'latest gadgets'}, {'playlist_name': 'Popcorn Picks', 'video_title': 'Pasta Recipe', 'video_description': 'make delicious Pasta'}, {'playlist_name': 'Movie Magic Marathon', 'video_title': 'Gamers Odyssey: Quests and Challenges', 'video_description': 'Embark on epic quests, solve puzzles'}, {'playlist_name': 'Film Fanatic Flicks', 'video_title': 'Crafty Creations Unleashed', 'video_description': 'Showcase your artistic flair and creativity'}, {'playlist_name': 'Silver Screen Gems', 'video_title': 'CHRONOS : Epic Orchestral Music', 'video_description': 'Dive into the timeless realm of CHRONOS'}, {'playlist_name': 'Blockbuster Binge', 'video_title': 'Tech Trends 2024: Predictions and Insights', 'video_description': 'Buckle up for a glimpse into the future!'}, {'playlist_name': 'Cinephile Classics', 'video_title': 'Lets Learn Science with Dr. Smith', 'video_description': 'Explore science'}, {'playlist_name': 'Reel Reviews', 'video_title': 'Pop Culture Quest', 'video_description': 'Embark on a quest with us'}, {'playlist_name': 'Hollywood Hits Hub', 'video_title': 'Bihe Pass Nepali movie', 'video_description': 'Bihe Pass Full Movie review'}]
PS C:\Users\Admin\Desktop\python with Mysql\demo>

```