

Aim: Write a python script which does CRUD operations on MongoDB

Procedure:

Step-1:

Check all the tools on the laptop (Python, Nodejs, Postman tool, MongoDB server).

Step-2:

Install pymongo using command prompt.

Command: `pip install pymongo`

Step-3:

Now, create a folder in the D-drive naming as "Python-Mongodb".

Open that folder in the visualstudio code.

Create a new file "app.py".

Now, type a python script to connect with MongoDB and Perform CRUD operations.

```
# Connect with MongoDB
from pymongo import MongoClient # pymongo - module, MongoClient - Class
try:
    client=MongoClient('127.0.0.1',27017) # ip address, port number
    print('MongoDB Server Connected')
    db=client['Amrutha']
    collection=db['mss']
    print("The initial collection data:")
    for i in collection.find():
        print(i)
    # insert data
    print("Inserting data into collection:")
    name=input("Enter name:")
    rollno=input("Enter rollno:")
    k={ }
    k['name']=name
    k['rollno']=rollno
    collection.insert_one(k)
    for i in collection.find():
        pass
    else:
        print(i)
    print("Creating a query")
    #creating query
    query={'name':'abi'}
    for i in collection.find(query):
        print(i)
```

```

#updating a document
print("Updating a document")
query={'name':'kohli'}
newvalue={"$set":{"name":'pinky'}}
collection.update_one(query,newvalue)

#deleting the document
print("Deleting a document")

query={'name':'abi'}
collection.delete_one(query)
print("The final collection after all the Crud operations:")
for i in collection.find():
    print(i)

except:
    print('MongoDB connection Failed')

```

Output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

b/app.py
MongoDB Server Connected
The initial collection data:
{'_id': ObjectId('6472079a98c421973042e002'), 'name': 'kohli', 'rollno': '34'}
{'_id': ObjectId('64747c62e1c2bf0559c1d296'), 'name': 'sita', 'rollno': '45'}
{'_id': ObjectId('6474bef4b859bdbd23b39751'), 'name': 'Amrutha', 'rollno': '83'}
Inserting data into collection:
Enter name:sunny
Enter rollno:567
{'_id': ObjectId('6474bf8ff7717699f8e844d9'), 'name': 'sunny', 'rollno': '567'}
Creating a query
Updating a document
Deleting a document
The final collection after all the Crud operations:
{'_id': ObjectId('6472079a98c421973042e002'), 'name': 'pinky', 'rollno': '34'}
{'_id': ObjectId('64747c62e1c2bf0559c1d296'), 'name': 'sita', 'rollno': '45'}
{'_id': ObjectId('6474bef4b859bdbd23b39751'), 'name': 'Amrutha', 'rollno': '83'}
{'_id': ObjectId('6474bf8ff7717699f8e844d9'), 'name': 'sunny', 'rollno': '567'}
PS D:\s_internship\pythonscript-Mongodb> 

```

In the above output, initially we have the 3 documents in the collection (i.e., kohli, sita, Amrutha).

After that we have inserted the data “Sunny” ,”567”

After that we created a query of finding the name “abi”. The data “abi” is not found in the collection ,so that it doesn’t show that data.

Again we updated and deleted the document in the collection.

In the output ,we can observe that the final collection after all the CRUD operations.

i.e.,

- 1) The new data has been inserted into the collection (i.e., “sunny”)
- 2) The name “Kohli” is updated as “Pinky”.
- 3) The data related to ‘abi’ has been deleted in the collection.