**Group B**

**Assignment No. 4**

**Problem Statement:**

**Database Connectivity: Write a program to implement Mongo DB database connectivity with any front end language to implement Database navigation operations(add, delete, edit etc.)**

**Execution:**

test> use Onkar

switched to db Onkar

* **Create**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

db = client['Onkar']

collection = db['Student']

dictionary = {'Roll\_no':1,'Name':'Aditya', 'Address':'Pune'}

collection.insert\_one(dictionary)

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python create.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

**MongoDB Output:**

Onkar> db.Student.find()

[

{

\_id: ObjectId('66f314295adae3bea814f319'),

Roll\_no: 1,

Name: 'Aditya',

Address: 'Pune'

}

]

* **Show Databases**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

alldbs = client.list\_database\_names()

print(alldbs)

col = client['Onkar']

print(col.list\_collection\_names())

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python showdbs.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

['Onkar', 'TE', 'admin', 'config', 'local']

['Student']

* **Insert**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

db = client['Onkar']

collection = db['Student']

dictionary2 = {'Roll\_no':24, 'Name':'Sid', 'Address':'Junnar'}

collection.insert\_one(dictionary2)

allthese = [{'Roll\_no':52, 'Name':'Suraj', 'Address':'Siddhatek'},{'roll\_no':54, 'Name':'Onkar', 'Address':'Akluj'}]

collection.insert\_many(allthese)

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python insert.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

**MongoDB Output:**

Onkar> db.Student.find()

[

{

\_id: ObjectId('66f314295adae3bea814f319'),

Roll\_no: 1,

Name: 'Aditya',

Address: 'Pune'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d76'),

Roll\_no: 24,

Name: 'Sid',

Address: 'Junnar'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d77'),

Roll\_no: 52,

Name: 'Suraj',

Address: 'Siddhatek'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d78'),

roll\_no: 54,

Name: 'Onkar',

Address: 'Akluj'

}

]

* **Read**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

db = client['Onkar']

collection = db['Student']

one = collection.find\_one({'Name':'Sid'})

print(one)

alldocs = collection.find()

for item in alldocs:

print(item)

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python read.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

{'\_id': ObjectId('66f3143c2000513b7fed1d76'), 'Roll\_no': 24, 'Name': 'Sid', 'Address': 'Junnar'}

{'\_id': ObjectId('66f314295adae3bea814f319'), 'Roll\_no': 1, 'Name': 'Aditya', 'Address': 'Pune'}

{'\_id': ObjectId('66f3143c2000513b7fed1d76'), 'Roll\_no': 24, 'Name': 'Sid', 'Address': 'Junnar'}

{'\_id': ObjectId('66f3143c2000513b7fed1d77'), 'Roll\_no': 52, 'Name': 'Suraj', 'Address': 'Siddhatek'}

{'\_id': ObjectId('66f3143c2000513b7fed1d78'), 'roll\_no': 54, 'Name': 'Onkar', 'Address': 'Akluj'}

* **Update**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

db = client['Onkar']

collection = db['Student']

refield = {'Name':'Sid'}

setfield = {'$set':{'Address':'Shivneri'}}

collection.update\_one(refield, setfield)

refield = {'Name':'Onkar'}

setfield = {'$set':{'Address':'Sadashivnagar'}}

collection.update\_many(refield, setfield)

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python update.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

**MongoDB output:**

Onkar> db.Student.find()

[

{

\_id: ObjectId('66f314295adae3bea814f319'),

Roll\_no: 1,

Name: 'Aditya',

Address: 'Pune'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d76'),

Roll\_no: 24,

Name: 'Sid',

Address: 'Shivneri'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d77'),

Roll\_no: 52,

Name: 'Suraj',

Address: 'Siddhatek'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d78'),

roll\_no: 54,

Name: 'Onkar',

Address: 'Sadashivnagar'

}

]

* **Delete**

**Code:**

import pymongo

if \_\_name\_\_ == "\_\_main\_\_":

print("Welcome to pyMongo")

client = pymongo.MongoClient("mongodb://127.0.0.1:27017/")

print(client)

db = client['Onkar']

collection = db['Student']

rec = {'Name':'Sid'}

collection.delete\_one(rec)

rec2 = {'Name':'Onkar'}

collection.delete\_many(rec2)

**Output:**

PS E:\TE\DBMS\Practicals\DBMS\_B4> python delete.py

Welcome to pyMongo

MongoClient(host=['127.0.0.1:27017'], document\_class=dict, tz\_aware=False, connect=True)

**MongoDB Output:**

Onkar> db.Student.find()

[

{

\_id: ObjectId('66f314295adae3bea814f319'),

Roll\_no: 1,

Name: 'Aditya',

Address: 'Pune'

},

{

\_id: ObjectId('66f3143c2000513b7fed1d77'),

Roll\_no: 52,

Name: 'Suraj',

Address: 'Siddhatek'

}

]