BDA LAB ASSIGNMENT 3

PA17- KETAKI PATIL

BATCH A1

PYTHON – MONGODB CODE :

```python
'''
BDA LAB 3 - PYTHON MONGODB CONNECTION
NAME : KETAKI PATIL
PANEL : A
ROLL NO :17
BATCH : A1

'''

import pymongo

#Creating a pymongo client
try:
    conn = pymongo.MongoClient(host="localhost", port=27017)
    print("Connected successfully!!!")
except:
    print("Could not connect to MongoDB")

#Verification
print("List of databases existing :")
print(conn.list_database_names())

# database name: mydatabase
db = conn.employee

# Created or Switched to collection names: myTable
coll = db.emp

def insert():
    try:
        employeeId = int(input('Enter Employee id :'))
        employeeDept = input('Enter Department :')
        employeeName = input('Enter Name :')
        print("Employee's Address -")
        employeeStreet=input('Enter Street :')
        employeeCity=input('Enter City :')
        employeePin=int(input('Enter Pin :'))
        employeeAge = int(input('Enter Age :'))
        employeeSalary = int(input('Enter Salary :'))

        coll.insert(
            {
                "Eid":employeeId,"Deptname":employeeDept,"Ename":employeeName,
                "Address":{"street":employeeStreet,"city":employeeCity, "pincode":employee
Pin},
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                        "age":employeeAge, "salary":employeeSalary
            })
            print('\nInserted data successfully\n')

    except Exception as e:
        print(str(e))

def read():
    try:
        empCol = coll.find()
        print('\n All records from Employee Database \n')
        for emp in empCol:
            print(emp)

    except Exception as e:
        print(str(e))

def update():
    try:
        criteria = int(input('\nEnter id to update\n'))
        select = int(input('\nDo you wish to update name? - press 1 for yes\n'))
        if select == 1:
            name = input('\nEnter name to update\n')
            coll.update_one(
                {"Eid": criteria},
                {
                    "$set": {
                        "Ename":name
                    }
                }
            )
        select = int(input('\nDo you wish to update Department? - press 1 for yes\n'))
        if select == 1:
            dept = input('\nEnter name to update\n')
            coll.update_one(
                {"Eid": criteria},
                {
                    "$set": {
                        "Deptname":dept
                    }
                }
            )

        select = int(input('\nDo you wish to Address? - press 1 for yes\n'))
        if select == 1:
            astreet = input('\nEnter street to update\n')
            acity = input('\nEnter city to update\n')
            apin = input('\nEnter pincode to update\n')
            coll.update_one(
                {"Eid": criteria},
                {
                    "$set": {
                        "Address.street":astreet,
                        "Address.city":acity,
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                        "Address.apin":apin
                    }
                }
            )

        select = int(input('\nDo you wish to update Age? - press 1 for yes\n'))
        if select == 1:
            age = int(input('\nEnter age to update\n'))
            coll.update_one(
                {"Eid": criteria},
                {
                    "$set": {
                        "age":age
                    }
                }
            )

        select = int(input('\nDo you wish to update Salary? - press 1 for yes\n'))
        if select == 1:
            sal = int(input('\nEnter salary to update\n'))
            coll.update_one(
                {"Eid": criteria},
                {
                    "$set": {
                        "salary":sal
                    }
                }
            )

        print("\n---Records updated successfully---\n")

    except Exception as e:
        print(str(e))

def delete():
    try:
        criteria = int(input('\nEnter employee id to delete\n'))
        coll.delete_many({"Eid":criteria})
        print('\nDeletion successful\n')
    except Exception as e:
        print(str(e))

def main():

    while(1):
    # chossing option to do CRUD operations
        selection = int(input('\nSelect :\n 1) insert\n 2) update\n 3) read\n 4) delete\n 5) exit\nSelection :'))

        if selection == 1:
            insert()
        elif selection == 2:
            update()
        elif selection == 3:
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            read()
        elif selection == 4:
            delete()
        elif selection == 5:
            break
        else:
            print('\n INVALID SELECTION \n')

main()
```

OUTPUT :

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\ketak\bda_pymongo> &
'C:\Users\ketak\AppData\Local\Microsoft\WindowsApps\PythonSoftwareFoundation.Python.3.7_qbz5n2
kfra8p0\python.exe' 'c:\Users\ketak\.vscode\extensions\ms-python.python-
2021.4.765268190\pythonFiles\lib\python\debugpy\launcher' '55441' '--'
'c:\Users\ketak\bda_pymongo\connection.py'
Connected successfully!!!
List of databases existing :
['admin', 'college', 'config', 'employee', 'hotel', 'institute', 'local', 'new_institute', 'restaurant', 'store']

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :1
Enter Employee id :4
Enter Deptartment :Designer
Enter Name :Priya
Employee's Address -
Enter Street :Gold Street
Enter City :Delhi
Enter Pin :401710
Enter Age :23
Enter Salary :50000
c:\Users\ketak\bda_pymongo\connection.py:36: DeprecationWarning: insert is deprecated. Use
insert_one or insert_many instead.
  "age":employeeAge, "salary":employeeSalary

Inserted data successfully

Select :

1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :3

 All records from Employee Database

{'_id': ObjectId('608d043ebd9de2bf1471934f'), 'Eid': 1, 'Deptname': 'Analytics', 'Ename': 'Aashita',
'Address': {'street': 'Vartak', 'city': 'Thane', 'pincode': 400606}, 'age': 24, 'salary': 75000}
{'_id': ObjectId('608d0752de2bca212d0c76fb'), 'Eid': 2, 'Deptname': 'HR', 'Ename': 'Sejal', 'Address':
{'street': 'Samta', 'city': 'Nagpur', 'pincode': 421001}, 'age': 21, 'salary': 35000}
{'_id': ObjectId('608d079ade2bca212d0c76fc'), 'Eid': 3, 'Deptname': 'PR', 'Ename': 'Pranjal', 'Address':
{'street': 'Karve', 'city': 'Kothrud', 'pincode': 400314}, 'age': 26, 'salary': 45000}
{'_id': ObjectId('608d07f509b2393060627e67'), 'Eid': 4, 'Deptname': 'Designer', 'Ename': 'Priya',
'Address': {'street': 'Gold Street', 'city': 'Delhi', 'pincode': 401710}, 'age': 23, 'salary': 50000}

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :2

Enter id to update
1

Do you wish to update name? - press 1 for yes
0

Do you wish to update Department? - press 1 for yes
0

Do you wish to Address? - press 1 for yes
1

Enter street to update
Kiyosa

Enter city to update
Tokyo

Enter pincode to update
721090

Do you wish to update Age? - press 1 for yes
0

Do you wish to update Salary? - press 1 for yes
1

Enter salary to update
60000

---Records updated successfully---

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :3

 All records from Employee Database

{'_id': ObjectId('608d043ebd9de2bf1471934f'), 'Eid': 1, 'Deptname': 'Analytics', 'Ename': 'Aashita',
'Address': {'street': 'Kiyosa', 'city': 'Tokyo', 'pincode': 400606, 'apin': '721090'}, 'age': 24, 'salary': 60000}
{'_id': ObjectId('608d0752de2bca212d0c76fb'), 'Eid': 2, 'Deptname': 'HR', 'Ename': 'Sejal', 'Address':
{'street': 'Samta', 'city': 'Nagpur', 'pincode': 421001}, 'age': 21, 'salary': 35000}
{'_id': ObjectId('608d079ade2bca212d0c76fc'), 'Eid': 3, 'Deptname': 'PR', 'Ename': 'Pranjal', 'Address':
{'street': 'Karve', 'city': 'Kothrud', 'pincode': 400314}, 'age': 26, 'salary': 45000}
{'_id': ObjectId('608d07f509b2393060627e67'), 'Eid': 4, 'Deptname': 'Designer', 'Ename': 'Priya',
'Address': {'street': 'Gold Street', 'city': 'Delhi', 'pincode': 401710}, 'age': 23, 'salary': 50000}

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :4

Enter employee id to delete
4

Deletion successful

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :3

 All records from Employee Database

{'_id': ObjectId('608d043ebd9de2bf1471934f'), 'Eid': 1, 'Deptname': 'Analytics', 'Ename': 'Aashita',
'Address': {'street': 'Kiyosa', 'city': 'Tokyo', 'pincode': 400606, 'apin': '721090'}, 'age': 24, 'salary': 60000}
{'_id': ObjectId('608d0752de2bca212d0c76fb'), 'Eid': 2, 'Deptname': 'HR', 'Ename': 'Sejal', 'Address':
{'street': 'Samta', 'city': 'Nagpur', 'pincode': 421001}, 'age': 21, 'salary': 35000}

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{'_id': ObjectId('608d079ade2bca212d0c76fc'), 'Eid': 3, 'Deptname': 'PR', 'Ename': 'Pranjal', 'Address':
{'street': 'Karve', 'city': 'Kothrud', 'pincode': 400314}, 'age': 26, 'salary': 45000}

Select :
 1) insert
 2) update
 3) read
 4) delete
 5) exit
Selection :5
PS C:\Users\ketak\bda_pymongo>
```