PYMONGO

INSERT

import pymongo

```
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
mylist = [
  {"empid": "1", "name": "Amy", "department": "cs", "designation": "teacher",
"salary": "40000"},
  {"empid": "2", "name": "Hannah", "department": "mech", "designation":
"teacher", "salary": "40000"},
  {"empid": "3", "name": "Michael", "department": "electronics", "designation":
"manager", "salary": "50000"},
  {"empid": "4", "name": "Sandy", "department": "cs", "designation": "clerk",
"salary": "25000"},
  {"empid": "5", "name": "Betty", "department": "electronics", "designation":
"officer", "salary": "45000"},
  {"empid": "6", "name": "Richard", "department": "cs", "designation": "teacher",
"salary": "40000"},
      {"empid": "7", "name": "Susan", "department": "mech", "designation":
"officer", "salary": "45000"},
```

```
{"empid": "8", "name": "Vicky", "department": "mech", "designation":
"teacher", "salary": "40000"},
  {"empid": '9', "name": "Ben", "department": "cs", "designation": "manager",
"salary": "50000"},
  {"empid": "10", "name": "William", "department": "electronics", "designation":
"teacher", "salary": "40000"},]
x = mycol.insert many(mylist)
print(x.inserted ids)
Output
{' id': ObjectId('6295dd932a5e7a68c68e00f0'), 'empid': '1', 'name': 'Amy',
'department': 'cs', 'designation': 'teaching staff', 'salary': '50000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f1'), 'empid': '2', 'name': 'Hannah',
'department': 'electronics', 'designation': 'manager', 'salary': '40000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f2'), 'empid': '3', 'name': 'Michael',
'department': 'electronics', 'designation': 'clerk', 'salary': '30000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f3'), 'empid': '4', 'name': 'Sandy',
'department': 'electronics', 'designation': 'salesman', 'salary': '20000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f4'), 'empid': '5', 'name': 'Betty',
'department': 'mechanical', 'designation': 'salesman', 'salary': '10000'}
```

```
{' id': ObjectId('6295dd932a5e7a68c68e00f5'), 'empid': '6', 'name': 'Richard',
'department': 'cs', 'designation': 'manager', 'salary': '60000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f6'), 'empid': '7', 'name': 'Susan',
'department': 'music', 'designation': 'musician', 'salary': '70000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f7'), 'empid': '8', 'name': 'Vicky',
'department': 'mechanial', 'designation': 'clerk', 'salary': '30000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f8'), 'empid': '9', 'name': 'Ben',
'department': 'music', 'designation': 'teacher', 'salary': '50000'}
{' id': ObjectId('6295dd932a5e7a68c68e00f9'), 'empid': '10', 'name': 'William',
'department': 'cs', 'designation': 'salesman', 'salary': '20000'}
Find
Find All
import pymongo
print("select all")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
for x in mycol.find():
```

print(x)

Find one

```
print("select one")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
x = mycol.find one()
print(x)
Find some
print("select some")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["customers"]
for x in mycol.find({},{ "id": 0, "name": 1, "address": 1 }):
print(x)
Output
select all
{' id': ObjectId('6295dcfd6e874e18610793d2'), 'empid': '1', 'name': 'Amy',
'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}
```

```
{' id': ObjectId('6295dcfd6e874e18610793d3'), 'empid': '2', 'name': 'Hannah',
'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793d4'), 'empid': '3', 'name': 'Michael',
'department': 'electronics', 'designation': 'manager', 'salary': '50000'}
{' id': ObjectId('6295dcfd6e874e18610793d5'), 'empid': '4', 'name': 'Sandy',
'department': 'Computer', 'designation': 'clerk', 'salary': '25000'}
{' id': ObjectId('6295dcfd6e874e18610793d6'), 'empid': '5', 'name': 'Betty',
'department': 'electronics', 'designation': 'officer', 'salary': '45000'}
{' id': ObjectId('6295dcfd6e874e18610793d7'), 'empid': '6', 'name': 'Richard',
'department': 'cs', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793d8'), 'empid': '7', 'name': 'Susan',
'department': 'mech', 'designation': 'officer', 'salary': '45000'}
{' id': ObjectId('6295dcfd6e874e18610793d9'), 'empid': '8', 'name': 'Vicky',
'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793da'), 'empid': '9', 'name': 'Ben',
'department': 'cs', 'designation': 'manager', 'salary': '50000'}
{' id': ObjectId('6295dcfd6e874e18610793db'), 'empid': '10', 'name': 'William',
'department': 'electronics', 'designation': 'teacher', 'salary': '40000'}
select one
{' id': ObjectId('6295dcfd6e874e18610793d2'), 'empid': '1', 'name': 'Amy',
'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}
```

select some

{'name': 'John', 'address': 'Highway 37'}

Sort

Sort in ascending order

```
import pymongo
print("sort in ascending order")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
mydoc = mycol.find().sort("name")
for x in mydoc:
print(x)
Sort in descending order
import pymongo
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
mydoc = mycol.find().sort("name", -1)
```

```
for x in mydoc:
    print(x)
```

Output

sort in ascending order

```
{' id': ObjectId('6295dcfd6e874e18610793d2'), 'empid': '1', 'name': 'Amy',
'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793da'), 'empid': '9', 'name': 'Ben',
'department': 'cs', 'designation': 'manager', 'salary': '50000'}
{' id': ObjectId('6295dcfd6e874e18610793d6'), 'empid': '5', 'name': 'Betty',
'department': 'electronics', 'designation': 'officer', 'salary': '45000'}
{' id': ObjectId('629dbffc0869e4f0a89e019a'), 'empid': '2', 'department':
'Computer', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('629dc0134864a5276e0bc191'), 'empid': '2', 'name': 'Hannah',
'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793d4'), 'empid': '3', 'name': 'Michael',
'department': 'electronics', 'designation': 'manager', 'salary': '50000'}
{' id': ObjectId('6295dcfd6e874e18610793d7'), 'empid': '6', 'name': 'Richard',
'department': 'cs', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793d5'), 'empid': '4', 'name': 'Sandy',
'department': 'Computer', 'designation': 'clerk', 'salary': '25000'}
{' id': ObjectId('6295dcfd6e874e18610793d8'), 'empid': '7', 'name': 'Susan',
'department': 'mech', 'designation': 'officer', 'salary': '45000'}
```

```
{'_id': ObjectId('6295dcfd6e874e18610793d9'), 'empid': '8', 'name': 'Vicky', 'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
```

{'_id': ObjectId('6295dcfd6e874e18610793db'), 'empid': '10', 'name': 'William', 'department': 'electronics', 'designation': 'teacher', 'salary': '40000'}

sort in descending order

```
{'_id': ObjectId('6295dcfd6e874e18610793db'), 'empid': '10', 'name': 'William', 'department': 'electronics', 'designation': 'teacher', 'salary': '40000'}
```

```
{'_id': ObjectId('6295dcfd6e874e18610793d9'), 'empid': '8', 'name': 'Vicky', 'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
```

```
{'_id': ObjectId('629dc0244a9ec924863e05b8'), 'empid': '7', 'name': 'Susan', 'department': 'mech', 'designation': 'officer', 'salary': '45000'}
```

- {'_id': ObjectId('6295dcfd6e874e18610793d5'), 'empid': '4', 'name': 'Sandy', 'department': 'Computer', 'designation': 'clerk', 'salary': '25000'}
- {'_id': ObjectId('6295dcfd6e874e18610793d7'), 'empid': '6', 'name': 'Richard', 'department': 'cs', 'designation': 'teacher', 'salary': '40000'}
- {'_id': ObjectId('6295dcfd6e874e18610793d4'), 'empid': '3', 'name': 'Michael', 'department': 'electronics', 'designation': 'manager', 'salary': '50000'}
- {'_id': ObjectId('629dbffc0869e4f0a89e019a'), 'empid': '2', 'name': 'Hannah', 'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
- {'_id': ObjectId('6295dcfd6e874e18610793d6'), 'empid': '5', 'name': 'Betty', 'department': 'electronics', 'designation': 'officer', 'salary': '45000'}
- {'_id': ObjectId('6295dcfd6e874e18610793da'), 'empid': '9', 'name': 'Ben', 'department': 'cs', 'designation': 'manager', 'salary': '50000'}
- {'_id': ObjectId('6295dcfd6e874e18610793d2'), 'empid': '1', 'name': 'Amy', 'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}

Update

Update one

```
import pymongo
print("update one")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
myquery = { "department": "cs" }
newvalues = { "$set": { "department": "Computer" } }
mycol.update one(myquery, newvalues)
for x in mycol.find():
print(x)
Update many
print("update many")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
```

```
myquery = { "name": { "$regex": "^H" } }
newvalues = { "$set": { "name": "Minnie" } }

x = mycol.update_many(myquery, newvalues)
print(x.modified_count, "documents updated.")
```

Output

update one

```
{'_id': ObjectId('6295dcfd6e874e18610793d2'), 'empid': '1', 'name': 'Amy',
'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}

{'_id': ObjectId('6295dcfd6e874e18610793d3'), 'empid': '2', 'name': 'Minnie',
'department': 'mech', 'designation': 'teacher', 'salary': '40000'}

{'_id': ObjectId('6295dcfd6e874e18610793d4'), 'empid': '3', 'name': 'Michael',
'department': 'electronics', 'designation': 'manager', 'salary': '50000'}

{'_id': ObjectId('6295dcfd6e874e18610793d5'), 'empid': '4', 'name': 'Sandy',
'department': 'Computer', 'designation': 'clerk', 'salary': '25000'}

{'_id': ObjectId('6295dcfd6e874e18610793d6'), 'empid': '5', 'name': 'Betty',
'department': 'electronics', 'designation': 'officer', 'salary': '45000'}

{'_id': ObjectId('6295dcfd6e874e18610793d7'), 'empid': '6', 'name': 'Richard',
'department': 'Computer', 'designation': 'teacher', 'salary': '40000'}
```

```
{' id': ObjectId('6295dcfd6e874e18610793d8'), 'empid': '7', 'name': 'Susan',
'department': 'mech', 'designation': 'officer', 'salary': '45000'}
{' id': ObjectId('6295dcfd6e874e18610793d9'), 'empid': '8', 'name': 'Vicky',
'department': 'mech', 'designation': 'teacher', 'salary': '40000'}
{' id': ObjectId('6295dcfd6e874e18610793da'), 'empid': '9', 'name': 'Ben',
'department': 'cs', 'designation': 'manager', 'salary': '50000'}
{' id': ObjectId('6295dcfd6e874e18610793db'), 'empid': '10', 'name': 'William',
'department': 'electronics', 'designation': 'teacher', 'salary': '40000'}
update many
```

3 documents updated.

Delete

Delete one

```
import pymongo
print("Delete one")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
myquery = { "department": "electronics" }
mycol.delete one(myquery)
```

Delete many

```
print("Delete many")
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
myquery = { "department": {"$regex": "^m"} }
x = mycol.delete_many(myquery)
print(x.deleted count, " documents deleted.")
Delete All
print("Delete all")
import pymongo
myclient = pymongo.MongoClient("mongodb://localhost:27017/")
mydb = myclient["mydatabase"]
mycol = mydb["Employee"]
x = mycol.delete many({})
```

print(x.deleted_count, " documents deleted.")

<u>Output</u>

Delete one

1 document deleted

Delete many

3 documents deleted.

Delete all

7 documents deleted.