1.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["mydatabase"]  
mycol = mydb["customer"]  
  
mydict = { "name": "John", "address": "Highway 37" }  
  
x = mycol.insert\_one(mydict)  
  
x = mycol.find\_one()  
  
print(x)

output:

{'\_id': ObjectId('629dbdf9cacb7bbcbfa8a3f3'), 'name': 'John', 'address': 'Highway 37'}

2.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo2"]  
mycol = mydb["employee"]  
  
mylist = [  
 { "name": "Amy", "address": "Apple st 652"},  
 { "name": "Hannah", "address": "Mountain 21"},  
 { "name": "Michael", "address": "Valley 345"},  
 { "name": "Sandy", "address": "Ocean blvd 2"},  
 { "name": "Betty", "address": "Green Grass 1"},  
 { "name": "Richard", "address": "Sky st 331"},  
 { "name": "Susan", "address": "One way 98"},  
 { "name": "Vicky", "address": "Yellow Garden 2"},  
 { "name": "Ben", "address": "Park Lane 38"},  
 { "name": "William", "address": "Central st 954"},  
 { "name": "Chuck", "address": "Main Road 989"},  
 { "name": "Viola", "address": "Sideway 1633"}  
]  
  
x = mycol.insert\_many(mylist)

output

[ObjectId('629dc1d4395ce873e6b47b76'), ObjectId('629dc1d4395ce873e6b47b77'), ObjectId('629dc1d4395ce873e6b47b78'), ObjectId('629dc1d4395ce873e6b47b79'), ObjectId('629dc1d4395ce873e6b47b7a'), ObjectId('629dc1d4395ce873e6b47b7b'), ObjectId('629dc1d4395ce873e6b47b7c'), ObjectId('629dc1d4395ce873e6b47b7d'), ObjectId('629dc1d4395ce873e6b47b7e'), ObjectId('629dc1d4395ce873e6b47b7f'), ObjectId('629dc1d4395ce873e6b47b80'), ObjectId('629dc1d4395ce873e6b47b81')]

3.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
mylist = [  
 { "\_id": 1, "name": "John", "address": "Highway 37"},  
 { "\_id": 2, "name": "Peter", "address": "Lowstreet 27"},  
 { "\_id": 3, "name": "Amy", "address": "Apple st 652"},  
 { "\_id": 4, "name": "Hannah", "address": "Mountain 21"},  
 { "\_id": 5, "name": "Michael", "address": "Valley 345"},  
 { "\_id": 6, "name": "Sandy", "address": "Ocean blvd 2"},  
 { "\_id": 7, "name": "Betty", "address": "Green Grass 1"},  
 { "\_id": 8, "name": "Richard", "address": "Sky st 331"},  
 { "\_id": 9, "name": "Susan", "address": "One way 98"},  
 { "\_id": 10, "name": "Vicky", "address": "Yellow Garden 2"},  
 { "\_id": 11, "name": "Ben", "address": "Park Lane 38"},  
 { "\_id": 12, "name": "William", "address": "Central st 954"},  
 { "\_id": 13, "name": "Chuck", "address": "Main Road 989"},  
 { "\_id": 14, "name": "Viola", "address": "Sideway 1633"}  
]  
for x in mycol.find():  
 print(x)

output

{'\_id': 1, 'name': 'John', 'address': 'Highway 37'}

{'\_id': 2, 'name': 'Peter', 'address': 'Lowstreet 27'}

{'\_id': 3, 'name': 'Amy', 'address': 'Apple st 652'}

{'\_id': 4, 'name': 'Hannah', 'address': 'Mountain 21'}

{'\_id': 5, 'name': 'Michael', 'address': 'Valley 345'}

{'\_id': 6, 'name': 'Sandy', 'address': 'Ocean blvd 2'}

{'\_id': 7, 'name': 'Betty', 'address': 'Green Grass 1'}

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 9, 'name': 'Susan', 'address': 'One way 98'}

{'\_id': 10, 'name': 'Vicky', 'address': 'Yellow Garden 2'}

{'\_id': 11, 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': 12, 'name': 'William', 'address': 'Central st 954'}

{'\_id': 13, 'name': 'Chuck', 'address': 'Main Road 989'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

4.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo2"]  
mycol = mydb["employee"]  
  
  
for x in mycol.find({},{ "\_id": 0, "name": 1, "address": 1 }):  
 print(x)

output:

{'\_id': 1, 'name': 'John', 'address': 'Highway 37'}

{'\_id': 2, 'name': 'Peter', 'address': 'Lowstreet 27'}

{'\_id': 3, 'name': 'Amy', 'address': 'Apple st 652'}

{'\_id': 4, 'name': 'Hannah', 'address': 'Mountain 21'}

{'\_id': 5, 'name': 'Michael', 'address': 'Valley 345'}

{'\_id': 6, 'name': 'Sandy', 'address': 'Ocean blvd 2'}

{'\_id': 7, 'name': 'Betty', 'address': 'Green Grass 1'}

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 9, 'name': 'Susan', 'address': 'One way 98'}

{'\_id': 10, 'name': 'Vicky', 'address': 'Yellow Garden 2'}

{'\_id': 11, 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': 12, 'name': 'William', 'address': 'Central st 954'}

{'\_id': 13, 'name': 'Chuck', 'address': 'Main Road 989'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

5.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo2"]  
mycol = mydb["employee"]  
  
myquery = { "address": "Park Lane 38" }  
  
mydoc = mycol.find(myquery)  
  
for x in mydoc:  
 print(x)

output

{'\_id': ObjectId('629dbfafce7710f58491c638'), 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': ObjectId('629dbfe367e8c2542f342e0c'), 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': ObjectId('629dbfee31396d79d72b783d'), 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': ObjectId('629dc1d4395ce873e6b47b7e'), 'name': 'Ben', 'address': 'Park Lane 38'}

6.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
myquery = { "address": { "$gt": "S" } }  
  
mydoc = mycol.find(myquery)  
  
for x in mydoc:  
 print(x)

output:

{'\_id': 5, 'name': 'Michael', 'address': 'Valley 345'}

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 10, 'name': 'Vicky', 'address': 'Yellow Garden 2'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

7.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
myquery = { "address": { "$regex": "^S" } }  
  
mydoc = mycol.find(myquery)  
  
for x in mydoc:

output:

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

8.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
mydoc = mycol.find().sort("name")  
  
for x in mydoc:  
 print(x)

output

{'\_id': 3, 'name': 'Amy', 'address': 'Apple st 652'}

{'\_id': 11, 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': 7, 'name': 'Betty', 'address': 'Green Grass 1'}

{'\_id': 13, 'name': 'Chuck', 'address': 'Main Road 989'}

{'\_id': 4, 'name': 'Hannah', 'address': 'Mountain 21'}

{'\_id': 1, 'name': 'John', 'address': 'Highway 37'}

{'\_id': 5, 'name': 'Michael', 'address': 'Valley 345'}

{'\_id': 2, 'name': 'Peter', 'address': 'Lowstreet 27'}

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 6, 'name': 'Sandy', 'address': 'Ocean blvd 2'}

{'\_id': 9, 'name': 'Susan', 'address': 'One way 98'}

{'\_id': 10, 'name': 'Vicky', 'address': 'Yellow Garden 2'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

{'\_id': 12, 'name': 'William', 'address': 'Central st 954'}

9.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
mydoc = mycol.find().sort("name", -1)  
  
for x in mydoc:  
 print(x)

output:

{'\_id': 12, 'name': 'William', 'address': 'Central st 954'}

{'\_id': 14, 'name': 'Viola', 'address': 'Sideway 1633'}

{'\_id': 10, 'name': 'Vicky', 'address': 'Yellow Garden 2'}

{'\_id': 9, 'name': 'Susan', 'address': 'One way 98'}

{'\_id': 6, 'name': 'Sandy', 'address': 'Ocean blvd 2'}

{'\_id': 8, 'name': 'Richard', 'address': 'Sky st 331'}

{'\_id': 2, 'name': 'Peter', 'address': 'Lowstreet 27'}

{'\_id': 5, 'name': 'Michael', 'address': 'Valley 345'}

{'\_id': 1, 'name': 'John', 'address': 'Highway 37'}

{'\_id': 4, 'name': 'Hannah', 'address': 'Mountain 21'}

{'\_id': 13, 'name': 'Chuck', 'address': 'Main Road 989'}

{'\_id': 7, 'name': 'Betty', 'address': 'Green Grass 1'}

{'\_id': 11, 'name': 'Ben', 'address': 'Park Lane 38'}

{'\_id': 3, 'name': 'Amy', 'address': 'Apple st 652'}

10.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo3"]  
mycol = mydb["employee"]  
  
x = mycol.delete\_many({})  
  
print(x.deleted\_count, " documents deleted.")

output:

13 documents deleted.

11.

import pymongo  
  
myclient = pymongo.MongoClient("mongodb://localhost:27017/")  
mydb = myclient["demo2"]  
mycol = mydb["employee"]  
  
myquery = { "address": { "$regex": "^S" } }  
newvalues = { "$set": { "name": "Minnie" } }  
  
x = mycol.update\_many(myquery, newvalues)  
  
print(x.modified\_count, "documents updated.")

output:

8 documents updated.