

Connected to Python 3.11.4

```
In [ ]: import pymongo
        client=pymongo.MongoClient(
            "mongodb://localhost:27017"
        )
```

```
In [ ]: db=client['Employee']
```

```
In [ ]: emp=db['employee']
```

```
In [ ]: data=[{"employeeid":121,
               "firstname":"Emma",
               "lastname":"Johnson",
               "age":30,
               "department":"Human Resources",
               "salary":50000},
             {"employeeid":134,
               "firstname":"David",
               "lastname":"Smith",
               "age":34,
               "department":"Marketing",
               "salary":55000},
             {"employeeid":145,
               "firstname":"Mia",
               "lastname":"Davis",
               "age":28,
               "department":"Information Tech",
               "salary":62000},
             {"employeeid":167,
               "firstname":"Lucas",
               "lastname":"Brown",
               "age":40,
               "department":"Sales",
               "salary":48000},
             {"employeeid":153,
               "firstname":"Sophia",
               "lastname":"Wilson",
               "age":33,
               "department":"Research",
               "salary":53000},
             ]
```

```
In [ ]: emp.insert_many(data)
```

```
Out[ ]: <pymongo.results.InsertManyResult at 0x1ffc192dcc0>
```

```
In [ ]: for i in emp.find():
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38daf'), 'employeeid': 121, 'firstname': 'Emma', 'lastname': 'Johnson', 'age': 30, 'department': 'Human Resources', 'salary': 50000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db0'), 'employeeid': 134, 'firstname': 'David', 'lastname': 'Smith', 'age': 34, 'department': 'Marketing', 'salary': 55000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db1'), 'employeeid': 145, 'firstname': 'Mia', 'lastname': 'Davis', 'age': 28, 'department': 'Information Tech', 'salary': 62000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db3'), 'employeeid': 153, 'firstname': 'Sophia', 'lastname': 'Wilson', 'age': 33, 'department': 'Research', 'salary': 53000}
```

```
In [ ]: for i in emp.find({"department":"Marketing"}):
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38db0'), 'employeeid': 134, 'firstname': 'David', 'lastname': 'Smith', 'age': 34, 'department': 'Marketing', 'salary': 55000}
```

```
In [ ]: for i in emp.find({"age":{"$gte":30}}):
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38daf'), 'employeeid': 121, 'firstname': 'Emma', 'lastname': 'Johnson', 'age': 30, 'department': 'Human Resources', 'salary': 50000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db0'), 'employeeid': 134, 'firstname': 'David', 'lastname': 'Smith', 'age': 34, 'department': 'Marketing', 'salary': 55000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db3'), 'employeeid': 153, 'firstname': 'Sophia', 'lastname': 'Wilson', 'age': 33, 'department': 'Research', 'salary': 53000}
```

```
In [ ]: for i in emp.find({"salary":{"$lt":50000}}):
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
```

```
In [ ]: for i in emp.find({"department":"Information Tech"},{"_id":0,"firstname":1,"salary":0}):
        print(i)
```

```
{'firstname': 'Mia', 'salary': 62000}
```

```
In [ ]: for i in emp.find().sort("salary",-1):
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38db1'), 'employeeid': 145, 'firstname': 'Mia', 'lastname': 'Davis', 'age': 28, 'department': 'Information Tech', 'salary': 62000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db0'), 'employeeid': 134, 'firstname': 'David', 'lastname': 'Smith', 'age': 34, 'department': 'Marketing', 'salary': 55000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db3'), 'employeeid': 153, 'firstname': 'Sophia', 'lastname': 'Wilson', 'age': 33, 'department': 'Research', 'salary': 53000}
{'_id': ObjectId('6562dd7a37cd13e25ba38daf'), 'employeeid': 121, 'firstname': 'Emma', 'lastname': 'Johnson', 'age': 30, 'department': 'Human Resources', 'salary': 50000}
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
```

```
In [ ]: for i in emp.find().sort("age",-1).limit(1):  
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
```

```
In [ ]: for i in emp.find({"department":"Sales","employeeid":{"$gte":150}}):  
        print(i)
```

```
{'_id': ObjectId('6562dd7a37cd13e25ba38db2'), 'employeeid': 167, 'firstname': 'Lucas', 'lastname': 'Brown', 'age': 40, 'department': 'Sales', 'salary': 48000}
```