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**Class :** TE A

**Roll No :** TECOA124

**Batch :** A2

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## **Assignment No. 9**

### **Title: CRUD in MongoDB**

#### **1.Create Database PCCOE**

```
> use pccoe124
switched to db pccoe124
> db
pccoe124
```

#### **2. Create following Collections**

**Teachers(Tname,dno,dname,experience,salary,date\_of\_joining )**

```
use pccoe124
switched to db pccoe124
> db
pccoe124
> db.createCollection("teachers")
{ "ok" : 1 }
```

**Students(Sname,roll\_no,class)**

```
db.createCollection("student")
{ "ok" : 1 }
```

#### **3. Find the information about all teachers**

```
> db.teachers.find({})
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
  "experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "tname" : "sonali", "dno" : 102, "dname" : "it",
  "experience" : 3, "salary" : 20000, "doj" : ISODate("2005-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
  "experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
  "experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
  "experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
  "experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
  "experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }
{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
  "experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }
```

#### **4. Find the information about all teachers of computer department**

**db.teachers.find({dname:'comp'})**

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

##### 5. Find the information about all teachers of computer,IT,and e&TC department

**db.teachers.find({dname:{\$in:['it','comp','entc']})**

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "tname" : "sonali", "dno" : 102, "dname" : "it",
"experience" : 3, "salary" : 20000, "doj" : ISODate("2005-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

##### 6. Find the information about all teachers of computer,IT,and E&TC department having salary greater than or equal to 10000/-

**db.teachers.find({dname:{\$in:['it','comp','entc']},salary:{\$gte:10000} )**

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "tname" : "sonali", "dno" : 102, "dname" : "it",
"experience" : 3, "salary" : 20000, "doj" : ISODate("2005-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

##### 7. Find the student information having roll\_no = 2 or Sname=xyz

**db.student.find({})**

```
{ "_id" : ObjectId("5d70a4cd3a696c644c18b6ec"), "name" : "ashwin", "roll" : 1 }
```

```
{ "_id" : ObjectId("5d70a5873a696c644c18b6ed"), "name" : "abc", "roll" : 2 }
```

```
{ "_id" : ObjectId("5d70a5cb3a696c644c18b6ee"), "name" : "mayur", "roll" : 3 }
```

```
{ "_id" : ObjectId("5d70a7e73a696c644c18b6ef"), "name" : "xyz", "roll" : 5 }
```

```
{ "_id" : ObjectId("5d70a9ef3a696c644c18b6f0"), "name" : "bhavesh", "roll" : 7 }
```

```
{ "_id" : ObjectId("5d70aa333a696c644c18b6f1"), "name" : "xyz", "roll" : 10 }
```

**db.student.find({\$or:{{roll:2},{name:'xyz'}}})**

```
{ "_id" : ObjectId("5d70a5873a696c644c18b6ed"), "name" : "abc", "roll" : 2 }
```

```
{ "_id" : ObjectId("5d70a7e73a696c644c18b6ef"), "name" : "xyz", "roll" : 5 }
```

```
{ "_id" : ObjectId("5d70aa333a696c644c18b6f1"), "name" : "xyz", "roll" : 10 }
```

**8. Update the experience of teacher praveen to 10years, if the entry is not available in database consider the entry as new entry.**

```
> db.teachers.update({tname:'praveen'},{$set:{'experience':10}},{upsert:'true'})
```

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",  
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "tname" : "sonali", "dno" : 102, "dname" : "it",  
"experience" : 3, "salary" : 20000, "doj" : ISODate("2005-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",  
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",  
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",  
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",  
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",  
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",  
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d70acb3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }
```

**9. Update the department of all the teachers working in IT department to COMP**

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",  
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "tname" : "sonali", "dno" : 102, "dname" : "it",  
"experience" : 3, "salary" : 20000, "doj" : ISODate("2005-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",  
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",  
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }

{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }

{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "tname" : "kulloli", "dno" : 102, "dname" : "it", "experience"
: 4, "salary" : 40000, "doj" : ISODate("1998-12-22T18:30:00Z") }

{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "tname" : "gokhale", "dno" : 102, "dname" : "it", "experience"
: 1, "salary" : 400, "doj" : ISODate("1999-03-18T18:30:00Z") }
```

```
> db.teachers.update({dname:'it'},{$set:{dname:'comp',dno:101}},{multi:true})
```

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-
31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }

{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }

{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }

{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-
22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }
```

```
{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }
```

#### 10. find the teachers name and their experience from teachers collection

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp", "experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp", "experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp", "experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc", "experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc", "experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech", "experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce", "experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }
```

```
{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }
```

```
{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }
```

```
> db.teachers.find({}, {tname:1, experience:1})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "experience" : 5 }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "experience" : 3, "tname" : "sonali" }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "experience" : 15 }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "experience" : 1 }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "experience" : 4 }
```

```
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "experience" : 2 }
```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "experience" : 7 }
```

```
{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "experience" : 6 }
```

```
{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }
{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "experience" : 4, "tname" : "kulloli" }
{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "experience" : 1, "tname" : "gokhale" }
```

### 11. Using Save() method insert one entry in department collection

```
db.createCollection('department')
```

```
{ "ok" : 1 }
```

```
db.department.save({dno:101,dname:'comp'})
```

```
> db.department.find({})
```

```
{ "_id" : ObjectId("5d70b0cea11857cf2efb5c40") }
```

```
{ "_id" : ObjectId("5d70b0fba11857cf2efb5c41"), "dno" : 101, "dname" : "comp" }
```

```
> db.department.save({dname:'it',dno:102})
```

```
> db.department.find({})
```

```
{ "_id" : ObjectId("5d70b0cea11857cf2efb5c40") }
```

```
{ "_id" : ObjectId("5d70b0fba11857cf2efb5c41"), "dno" : 101, "dname" : "comp" }
```

```
{ "_id" : ObjectId("5d70b19aa11857cf2efb5c42"), "dname" : "it", "dno" : 102 }
```

```
> db.department.save({dname:'entc',dno:103})
```

```
> db.department.save({dname:'mech',dno:104})
```

```
> db.department.save({dname:'ce',dno:105})
```

```
> db.department.find({})
```

```
{ "_id" : ObjectId("5d70b0cea11857cf2efb5c40") }
```

```
{ "_id" : ObjectId("5d70b0fba11857cf2efb5c41"), "dno" : 101, "dname" : "comp" }
```

```
{ "_id" : ObjectId("5d70b19aa11857cf2efb5c42"), "dname" : "it", "dno" : 102 }
```

```
{ "_id" : ObjectId("5d70b1baa11857cf2efb5c43"), "dname" : "entc", "dno" : 103 }
```

```
{ "_id" : ObjectId("5d70b1cea11857cf2efb5c44"), "dname" : "mech", "dno" : 104 }
```

```
{ "_id" : ObjectId("5d70b1dba11857cf2efb5c45"), "dname" : "ce", "dno" : 105 }
```

### 12. Using Save() method change the dept of teacher praveen to IT

```
> db.teachers.save({tname:'praveen',experience:10,dname:'it'})
```

```
> db.teachers.find({})
```

```

{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-
31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }

{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }

{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }

{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "experience" : 10, "tname" : "praveen" }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-
22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }

{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-
18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }

{ "_id" : ObjectId("5d70b2c8a11857cf2efb5c46"), "tname" : "praveen", "experience" : 10, "dname" : "it" }

> db.teachers.save({"_id" :
ObjectId("5d70acbf3a696c644c18b6f2"),tname:'praveen',experience:10,dname:'it'})

> db.teachers.find({})

{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-
31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }

{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }

{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }

```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-
22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }

{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-
18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }

{ "_id" : ObjectId("5d70b2c8a11857cf2efb5c46"), "tname" : "praveen", "experience" : 10, "dname" : "it" }

{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "tname" : "praveen", "experience" : 10, "dname" : "it" }
```

### 13. Delete all the documents from teachers collection having IT dept.

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",
"experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-
31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }

{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",
"experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",
"experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }

{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",
"experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }

{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",
"experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }

{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-
22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }

{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-
18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }

{ "_id" : ObjectId("5d70b2c8a11857cf2efb5c46"), "tname" : "praveen", "experience" : 10, "dname" : "it" }

{ "_id" : ObjectId("5d70acbf3a696c644c18b6f2"), "tname" : "praveen", "experience" : 10, "dname" : "it" }
```

```
> db.teachers.remove({'dname':'it'})
```



```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",  
  "experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",  
  "experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",  
  "experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",  
  "experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",  
  "experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",  
  "experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",  
  "experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }
```

```
{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }
```

#### 14. display with pretty() method, the first 3 documents in teachers collection in ascending order

```
> db.teachers.find({})
```

```
{ "_id" : ObjectId("5d68a54e929b042788bd46c1"), "tname" : "rahul", "dno" : 101, "dname" : "comp",  
  "experience" : 5, "salary" : 50000, "doj" : ISODate("1998-12-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a62d929b042788bd46c2"), "dname" : "comp", "dno" : 101, "doj" : ISODate("2005-05-31T18:30:00Z"), "experience" : 3, "salary" : 20000, "tname" : "sonali" }
```

```
{ "_id" : ObjectId("5d68a696929b042788bd46c3"), "tname" : "sudeep", "dno" : 101, "dname" : "comp",  
  "experience" : 15, "salary" : 200000, "doj" : ISODate("1997-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a724929b042788bd46c4"), "tname" : "ashley", "dno" : 101, "dname" : "comp",  
  "experience" : 1, "salary" : 2000, "doj" : ISODate("2018-05-31T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a928929b042788bd46c5"), "tname" : "reema", "dno" : 103, "dname" : "entc",  
  "experience" : 4, "salary" : 30000, "doj" : ISODate("2012-12-11T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68a994929b042788bd46c6"), "tname" : "sayali", "dno" : 103, "dname" : "entc",  
  "experience" : 2, "salary" : 10000, "doj" : ISODate("2017-08-22T18:30:00Z") }
```

```
{ "_id" : ObjectId("5d68aac2929b042788bd46c7"), "tname" : "shaikh", "dno" : 104, "dname" : "mech",
"experience" : 7, "salary" : 100000, "doj" : ISODate("2000-07-28T18:30:00Z") }

{ "_id" : ObjectId("5d68aaf8929b042788bd46c8"), "tname" : "jagtap", "dno" : 105, "dname" : "ce",
"experience" : 6, "salary" : 70000, "doj" : ISODate("2002-07-19T18:30:00Z") }

{ "_id" : ObjectId("5d70ae9da11857cf2efb5c3e"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1998-12-
22T18:30:00Z"), "experience" : 4, "salary" : 40000, "tname" : "kulloli" }

{ "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"), "dname" : "comp", "dno" : 101, "doj" : ISODate("1999-03-
18T18:30:00Z"), "experience" : 1, "salary" : 400, "tname" : "gokhale" }
```

**db.teachers.find().limit(3).pretty().sort({tname:1})**

```
{
  "_id" : ObjectId("5d68a724929b042788bd46c4"),
  "tname" : "ashley",
  "dno" : 101,
  "dname" : "comp",
  "experience" : 1,
  "salary" : 2000,
  "doj" : ISODate("2018-05-31T18:30:00Z")
}

{
  "_id" : ObjectId("5d70aec5a11857cf2efb5c3f"),
  "dname" : "comp",
  "dno" : 101,
  "doj" : ISODate("1999-03-18T18:30:00Z"),
  "experience" : 1,
  "salary" : 400,
  "tname" : "gokhale"
}

{
  "_id" : ObjectId("5d68aaf8929b042788bd46c8"),
  "tname" : "jagtap",
```

```
"dno" : 105,  
  
"dname" : "ce",  
  
"experience" : 6,  
  
"salary" : 70000,  
  
"doj" : ISODate("2002-07-19T18:30:00Z")  
  
}
```

