

# ADBMS LAB

## CO4- Programs

1.Create a database named Employee. Create a collection named empDetails

You can use any of the fields Name, Age ,e\_mail, phone,salary

1) Insert 5 documents in it using the different insert() methods and

```
> use EMP
```

```
switched to db EMP
```

```
> db
```

```
EMP
```

```
> db.createCollection("empDetails")
```

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

```
> show collections
```

```
empDetails
```

```
>
```

```
db.empDetails.insert({Name:"Mohan",Age:30,Email:"mohan@gmail.com",  
Salary:5000})
```

```
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.empDetails.insert({Name:"Raju",Age:35,Email:"raju@gmail.com",Salary:  
7000})
```

```
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.empDetails.insert({Name:"Bhuvan",Age:25,Email:"bhuvan@gmail.com",  
Salary:10000})
```

```
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.empDetails.insert({Name:"Meera",Age:27,Email:"meera@gmail.com",salary:9000})
```

```
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.empDetails.insert({Name:"Maya",Age:28,Email:"maya@gmail.com",salary:15000})
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.empDetails.count()
```

```
5
```

**a) Find the details of employee whose name is mohan**

```
> db.empDetails.findOne({Name:"Mohan"})
```

```
{
```

```
  "_id" : ObjectId("611283a5ba6fd56e242ddb3a"),
```

```
  "Name" : "Mohan",
```

```
  "Age" : 30,
```

```
  "Email" : "mohan@gmail.com",
```

```
  "Salary" : 5000
```

```
}
```

**b) Fetch the documents of employees whose salary >=5000**

```
> db.empDetails.find({$and:[{salary:{$gte:5000}}]})
```

```
{ "_id" : ObjectId("613726aa40cbddb84b494e0d"), "Name" : "Mohan",  
  "Age" : 30, "Email" : "moham@gmail.com", "salary" : 5000 }
```

```
{ "_id" : ObjectId("613726d340cbddb84b494e0e"), "Name" : "Raju", "Age" : 35, "Email" : "raju@gmail.com", "salary" : 7000 }
```

```
{ "_id" : ObjectId("613726fc40cbddb84b494e0f"), "Name" : "Bhuvan", "Age" : 25, "Email" : "bhuvan@gmail.com", "salary" : 10000 }
```

```
{ "_id" : ObjectId("6137272f40cbddb84b494e10"), "Name" : "Meera", "Age" : 27, "Email" : "meera@gmail.com", "salary" : 9000 }
```

```
{ "_id" : ObjectId("6137275040cbddb84b494e11"), "Name" : "Maya", "Age" : 28, "Email" : "maya@gmail.com", "salary" : 15000 }
```

**c) Find the documents of employees whose name starts with letter r**

```
> db.empDetails.find({$or:[{"Name":/^R/}]});
```

```
{ "_id" : ObjectId("613726d340cbddb84b494e0e"), "Name" : "Raju", "Age" : 35, "Email" : "raju@gmail.com", "salary" : 7000 }
```

**d) Find the documents of employees whose name is not in mohan,raju,bhuvan**

```
> db.empDetails.find({"Name":{$not:{$in:["Mohan","Raju","Bhuvan"]}}}).pretty()
```

```
{
  "_id" : ObjectId("6137272f40cbddb84b494e10"),
  "Name" : "Meera",
  "Age" : 27,
  "Email" : "meera@gmail.com",
  "salary" : 9000
}
```

```
{
  "_id" : ObjectId("6137275040cbedb84b494e11"),
  "Name" : "Maya",
  "Age" : 28,
  "Email" : "maya@gmail.com",
  "salary" : 15000
}
```

**e) Find the documents of employees whose names are mohan , raju, bhuvan**

```
>
db.empDetails.find({"Name":{$in:["Mohan","Raju","Bhuvan"]}}).pretty()
{
  "_id" : ObjectId("613726aa40cbedb84b494e0d"),
  "Name" : "Mohan",
  "Age" : 30,
  "Email" : "moham@gmail.com",
  "salary" : 5000
}
{
  "_id" : ObjectId("613726d340cbedb84b494e0e"),
  "Name" : "Raju",
  "Age" : 35,
  "Email" : "raju@gmail.com",
  "salary" : 7000
}
```

```
{
  "_id" : ObjectId("613726fc40cbddb84b494e0f"),
  "Name" : "Bhuvan",
  "Age" : 25,
  "Email" : "bhuvan@gmail.com",
  "salary" : 10000
}
```

**f) Retrieve the details of employees whose age is less than 30. Display only the fields name, salary**

```
> db.empDetails.find({Age:{$lt:30}}, {Name:1,salary:1})
```

```
{ "_id" : ObjectId("613726fc40cbddb84b494e0f"), "Name" : "Bhuvan",
"salary" : 10000 }
{ "_id" : ObjectId("6137272f40cbddb84b494e10"), "Name" : "Meera",
"salary" : 9000 }
{ "_id" : ObjectId("6137275040cbddb84b494e11"), "Name" : "Maya",
"salary" : 15000 }
```

**g) Find the details of employees whose salary is greater than 5000 and age is less than 30**

```
> db.empDetails.find({$and:[{salary:{$gt:5000}}, {Age:{$lt:30}}]})
```

```
{ "_id" : ObjectId("613726fc40cbddb84b494e0f"), "Name" : "Bhuvan",
"Age" : 25, "Email" : "bhuvan@gmail.com", "salary" : 10000 }
{ "_id" : ObjectId("6137272f40cbddb84b494e10"), "Name" : "Meera",
```

```
"Age" : 27, "Email" : "meera@gmail.com", "salary" : 9000 }
```

```
{ "_id" : ObjectId("6137275040cbddb84b494e11"), "Name" : "Maya", "Age" : 28, "Email" : "maya@gmail.com", "salary" : 15000 }
```

**h) Update the e-mail of employee whose name is mohan // findOneAndUpdate()**

```
>  
db.empDetails.updateOne({Name:'Mohan'},{$set:{Email:'mohan12345@gmail.com'}})
```

```
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
>  
db.empDetails.findOneAndUpdate({Name:'Mohan'},{$set:{Email:'mohan12345@gmail.com'}})
```

```
{  
  "_id" : ObjectId("613726aa40cbddb84b494e0d"),  
  "Name" : "Mohan",  
  "Age" : 30,  
  "Email" : "mohan12345@gmail.com",  
  "salary" : 5000  
}
```

**i) Delete all the documents of employees whose age>56**

```
> db.empDetails.find({Age:{$gt:56}})
```

```
> db.empDetails.deleteMany({Age:{$gt:56}})
```

```
{ "acknowledged" : true, "deletedCount" : 0
```