

```
C:\Users\computer>mongosh
```

```
Current Mongosh Log ID: 663cefdce579faeb7b46b798
```

```
Connecting to:
```

```
mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.2.5
```

```
Using MongoDB: 7.0.9
```

```
Using Mongosh: 2.2.5
```

```
For mongosh info see: https://docs.mongodb.com/mongosh-shell/
```

```
-----
```

```
The server generated these startup warnings when booting
```

```
2024-05-09T19:47:58.398+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
```

```
-----
```

```
test> use Employee
```

```
switched to db Employee
```

```
Employee> db.createCollection("EmployeeDetails")
```

```
{ ok: 1 }
```

```
*****A*****
```

```
Employee>
```

```
db.EmployeeDetails.insertOne({_id:101,empname:"Ram",salary:15000,designation:"Clerk"})
```

```
{ acknowledged: true, insertedId: 101 }
```

```
Employee>
```

```
db.EmployeeDetails.insertOne({_id:102,empname:"Shyam",salary:20000,designation:"Administrator"})
```

```
{ acknowledged: true, insertedId: 102 }
```

```
Employee>
```

```
db.EmployeeDetails.insertOne({_id:103,empname:"Hari",salary:10000,designation:"Supervisor"})
```

```
{ acknowledged: true, insertedId: 103 }
```

```
Employee>
```

```
db.EmployeeDetails.insertOne({_id:104,empname:"Sita",salary:15000,designation:"Clerk"})
```

```
{ acknowledged: true, insertedId: 104 }
```

```
Employee>
db.EmployeeDetails.insertOne({_id:105,empname:"Rose",salary:20000,designation:"Administrator"})
```

```
{ acknowledged: true, insertedId: 105 }
```

```
Employee>
db.EmployeeDetails.insertOne({_id:106,empname:"Maria",salary:25000,designation:"Manager"})
```

```
{ acknowledged: true, insertedId: 106 }
```

```
*****B*****
```

```
Employee> db.EmployeeDetails.find().pretty()
```

```
[
  {
    _id: 101, empname: 'Ram', salary: 15000, designation: 'Clerk' },
  {
    _id: 102,
    empname: 'Shyam',
    salary: 20000,
    designation: 'Administrator'
  },
  {
    _id: 103,
    empname: 'Hari',
    salary: 10000,
    designation: 'Supervisor'
  },
  {
    _id: 104, empname: 'Sita', salary: 15000, designation: 'Clerk' },
  {
    _id: 105,
    empname: 'Rose',
    salary: 20000,
    designation: 'Administrator'
  },
  {
    _id: 106, empname: 'Maria', salary: 25000, designation: 'Manager' }
```

```
]
```

```
Employee> db.EmployeeDetails.find().forEach(printjson)
```

```
{
```

```
  _id: 101,  
  empname: 'Ram',  
  salary: 15000,  
  designation: 'Clerk'
```

```
}
```

```
{
```

```
  _id: 102,  
  empname: 'Shyam',  
  salary: 20000,  
  designation: 'Administrator'
```

```
}
```

```
{
```

```
  _id: 103,  
  empname: 'Hari',  
  salary: 10000,  
  designation: 'Supervisor'
```

```
}
```

```
{
```

```
  _id: 104,  
  empname: 'Sita',  
  salary: 15000,  
  designation: 'Clerk'
```

```
}
```

```
{
```

```
  _id: 105,  
  empname: 'Rose',  
  salary: 20000,  
  designation: 'Administrator'
```

```
}  
{  
  _id: 106,  
  empname: 'Maria',  
  salary: 25000,  
  designation: 'Manager'  
}  
*****C*****
```

```
Employee> db.EmployeeDetails.find({"empname":{$regex:/^S/}})
```

```
[  
  {  
    _id: 102,  
    empname: 'Shyam',  
    salary: 20000,  
    designation: 'Administrator'  
  },  
  { _id: 104, empname: 'Sita', salary: 15000, designation: 'Clerk' }  
]
```

```
Employee> db.EmployeeDetails.find({"empname":{$regex:/^S/}}).forEach(printjson)
```

```
{  
  _id: 102,  
  empname: 'Shyam',  
  salary: 20000,  
  designation: 'Administrator'  
}  
  
{  
  _id: 104,  
  empname: 'Sita',  
  salary: 15000,  
  designation: 'Clerk'
```

```
}
```

```
*****D*****
```

```
Employee>
```

```
db.EmployeeDetails.findOneAndUpdate({"empname":"Sita"},{$inc:{salary:1000}},{returnDocument:"after"})
```

```
{ _id: 104, empname: 'Sita', salary: 16000, designation: 'Clerk' }
```

```
*****E*****
```

```
Employee> db.EmployeeDetails.updateMany({},{$set:{"doj":""}})
```

```
{
```

```
  acknowledged: true,
```

```
  insertedId: null,
```

```
  matchedCount: 6,
```

```
  modifiedCount: 6,
```

```
  upsertedCount: 0
```

```
}
```

```
Employee> db.EmployeeDetails.find().pretty()
```

```
[
```

```
{
```

```
  _id: 101,
```

```
  empname: 'Ram',
```

```
  salary: 15000,
```

```
  designation: 'Clerk',
```

```
  doj: ""
```

```
},
```

```
{
```

```
  _id: 102,
```

```
  empname: 'Shyam',
```

```
  salary: 20000,
```

```
  designation: 'Administrator',
```

```
  doj: ""
```

```
},
```

```
{
```

```

    _id: 103,
    empname: 'Hari',
    salary: 10000,
    designation: 'Supervisor',
    doj: ""
  },
  {
    _id: 104,
    empname: 'Sita',
    salary: 16000,
    designation: 'Clerk',
    doj: ""
  },
  {
    _id: 105,
    empname: 'Rose',
    salary: 20000,
    designation: 'Administrator',
    doj: ""
  },
  {
    _id: 106,
    empname: 'Maria',
    salary: 25000,
    designation: 'Manager',
    doj: ""
  }
]

```

*****F*****

Employee>

```

db.EmployeeDetails.aggregate([{$match:{designation:"Clerk"}},{ $group:{_id:"$designation",totalsalary:{$sum:"$salary"}}}])

```

```
[ { _id: 'Clerk', totalsalary: 31000 } ]
```

```
Employee> db.EmployeeDetails.aggregate([{$group:{_id:null,totalsalary:{$sum:"$salary"}}}])
```

```
[ { _id: null, totalsalary: 106000 } ]
```

```
Employee> db.EmployeeDetails.aggregate([{$group:{_id:null,totalsalary:{$avg:"$salary"}}}])
```

```
[ { _id: null, totalsalary: 17666.666666666668 } ]
```

```
*****G*****
```

```
Employee> db.EmployeeDetails.deleteOne({_id:106})
```

```
{ acknowledged: true, deletedCount: 1 }
```

```
Employee> db.EmployeeDetails.find().pretty()
```

```
[
```

```
{
```

```
  _id: 101,
```

```
  empname: 'Ram',
```

```
  salary: 15000,
```

```
  designation: 'Clerk',
```

```
  doj: "
```

```
},
```

```
{
```

```
  _id: 102,
```

```
  empname: 'Shyam',
```

```
  salary: 20000,
```

```
  designation: 'Administrator',
```

```
  doj: "
```

```
},
```

```
{
```

```
  _id: 103,
```

```
  empname: 'Hari',
```

```
  salary: 10000,
```

```
  designation: 'Supervisor',
```

```
  doj: "
```

```
},
```

```
{
  _id: 104,
  empname: 'Sita',
  salary: 16000,
  designation: 'Clerk',
  doj: ""
},
{
  _id: 105,
  empname: 'Rose',
  salary: 20000,
  designation: 'Administrator',
  doj: ""
}
]
```

*****H*****

Employee> use admin

switched to db admin

admin> db.createUser({user:"Mohan",pwd:"mohan123",roles:[{role:"readWrite",db:"Employee"}]})

{ ok: 1 }

admin> use Mohan

switched to db Mohan

Mohan> show dbs

Employee 72.00 KiB

admin 52.00 KiB

config 108.00 KiB

local 40.00 KiB

Mohan> use Employee

switched to db Employee

Employee> db.EmployeeDetails.find()

[


```
{
  _id: 101,
  empname: 'Ram',
  salary: 15000,
  designation: 'Clerk',
  doj: ""
},
{
  _id: 102,
  empname: 'Shyam',
  salary: 20000,
  designation: 'Administrator',
  doj: ""
},
{
  _id: 103,
  empname: 'Hari',
  salary: 10000,
  designation: 'Supervisor',
  doj: ""
},
{
  _id: 104,
  empname: 'Sita',
  salary: 16000,
  designation: 'Clerk',
  doj: ""
},
{
  _id: 105,
  empname: 'Rose',
```

```
    salary: 20000,  
    designation: 'Administrator',  
    doj: "  
  }  
]  
Employee>
```