BIG-DATA-ANALYSIS LAB
9/02/2026

MongoDB Queries - 1BM23CS333

```
mongosh mongodb://127.0.0.    ×    +    ∨

Microsoft Windows [Version 10.0.26100.7623]
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C:\Users\student>mongosh
Current Mongosh Log ID: 6989a2879a3a13ba051e2620
Connecting to:          mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.5.10
Using MongoDB:          8.0.11
Using Mongosh:          2.5.10
mongosh 2.6.0 is available for download: https://www.mongodb.com/try/download/shell

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

------
   The server generated these startup warnings when booting
   2026-02-09T08:35:42.510+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.Employee_Info.insertMany([
... {
...   Emp_Id:121,
...   Emp_Name:"Amit",
...   Designation:"Software Engineer",
...   Date_of_Joining:new Date("2019-06-15"),
...   Salary:60000,
...   Dept_Name:"IT"
... },
... {
...   Emp_Id:122,
...   Emp_Name:"Ravi",
...   Designation:"Senior Engineer",
...   Date_of_Joining:new Date("2018-03-20"),
...   Salary:75000,
...   Dept_Name:"R&D"
... },
... {
...   Emp_Id:123,
...   Emp_Name:"Meera",
...   Designation:"Manager",
...   Date_of_Joining:new Date("2016-01-10"),
...   Salary:90000,
...   Dept_Name:"HR"
... }
... ])
...
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('6989a2be9a3a13ba051e2621'),
    '1': ObjectId('6989a2be9a3a13ba051e2622'),
```

```
Employee> db.Employee_Info.find()
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
    Dept_Name: 'IT'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2622'),
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2623'),
    Emp_Id: 123,
    Emp_Name: 'Meera',
    Designation: 'Manager',
    Date_of_Joining: ISODate('2016-01-10T00:00:00.000Z'),
    Salary: 90000,
    Dept_Name: 'HR'
  }
]
Employee> db.Employee_Info.find().pretty()
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
    Dept_Name: 'IT'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2622'),
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
```

```
Employee> db.Employee_Info.find().pretty()
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
    Dept_Name: 'IT'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2622'),
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2623'),
    Emp_Id: 123,
    Emp_Name: 'Meera',
    Designation: 'Manager',
    Date_of_Joining: ISODate('2016-01-10T00:00:00.000Z'),
    Salary: 90000,
    Dept_Name: 'HR'
  }
]
Employee> db.Employee_Info.updateOne(
...   {Emp_Id:121},
...   {$set:{Emp_Name:"Amit Kumar", Dept_Name:"Data Science"}}
... )
...
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Employee> db.Employee_Info.find({Emp_Id:121})
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit Kumar',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
```

```
Employee> db.Employee_Info.updateOne(
...    {Emp_Id:121},
...    {$set:{Emp_Name:"Amit Kumar", Dept_Name:"Data Science"}}
... )
...
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Employee> db.Employee_Info.find({Emp_Id:121})
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit Kumar',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
    Dept_Name: 'Data Science'
  }
]
Employee> db.Employee_Info.find().sort({Salary:-1})
[
  {
    _id: ObjectId('6989a2be9a3a13ba051e2623'),
    Emp_Id: 123,
    Emp_Name: 'Meera',
    Designation: 'Manager',
    Date_of_Joining: ISODate('2016-01-10T00:00:00.000Z'),
    Salary: 90000,
    Dept_Name: 'HR'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2622'),
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit Kumar',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
```

```
mongosh mongodb://127.0.0.    ✕    +    ∨

Employee> db.Employee_Info.updateOne(
..    {Emp_Id:121},
..    {$set:{
..       Projects:["AI-Analytics","Cloud-Migration","BigData-Pipeline"]
..    }}
.. )
..
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Employee> db.Employee_Info.find().sort({Salary:1})

  {
    _id: ObjectId('6989a2be9a3a13ba051e2621'),
    Emp_Id: 121,
    Emp_Name: 'Amit Kumar',
    Designation: 'Software Engineer',
    Date_of_Joining: ISODate('2019-06-15T00:00:00.000Z'),
    Salary: 60000,
    Dept_Name: 'Data Science',
    Projects: [ 'AI-Analytics', 'Cloud-Migration', 'BigData-Pipeline' ]
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2622'),
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2623'),
    Emp_Id: 123,
    Emp_Name: 'Meera',
    Designation: 'Manager',
    Date_of_Joining: ISODate('2016-01-10T00:00:00.000Z'),
    Salary: 90000,
    Dept_Name: 'HR'
  }

Employee> db.Employee_Info.insertOne({
..    Emp_Id:130,
..    Emp_Name:"TemporaryUser",
..    createdAt:new Date()
.. })
..
```

```
    Emp_Id: 122,
    Emp_Name: 'Ravi',
    Designation: 'Senior Engineer',
    Date_of_Joining: ISODate('2018-03-20T00:00:00.000Z'),
    Salary: 75000,
    Dept_Name: 'R&D'
  },
  {
    _id: ObjectId('6989a2be9a3a13ba051e2623'),
    Emp_Id: 123,
    Emp_Name: 'Meera',
    Designation: 'Manager',
    Date_of_Joining: ISODate('2016-01-10T00:00:00.000Z'),
    Salary: 90000,
    Dept_Name: 'HR'
  }
]
Employee> db.Employee_Info.insertOne({
...   Emp_Id:130,
...   Emp_Name:"TemporaryUser",
...   createdAt:new Date()
... })
...
{
  acknowledged: true,
  insertedId: ObjectId('6989a3909a3a13ba051e2624')
}
Employee> db.Employee_Info.createIndex(
...   {createdAt:1},
...   {expireAfterSeconds:15}
... )
...
createdAt_1
Employee> db.Employee_Info.find({Emp_Id:130})
[
  {
    _id: ObjectId('6989a3909a3a13ba051e2624'),
    Emp_Id: 130,
    Emp_Name: 'TemporaryUser',
    createdAt: ISODate('2026-02-09T09:06:24.471Z')
  }
]
Employee> show dbs
Employee        108.00 KiB
Employee_Info    72.00 KiB
admin            40.00 KiB
config          108.00 KiB
e_commerce_db   120.00 KiB
local            96.00 KiB
travelmate       40.00 KiB
Employee>
```