

# Queries-B1

## Creation

```
use empDB  
db.createCollection("Employee")
```

## Inserting data

```
db.Employee.insertMany([
  {
    Empid: 1,
    Name: { FName: "Ayush", LName: "Kalaskar" },
    Company_name: "Oscorp",
    Salary: 50000,
    Designation: "Programmer",
    Age: 28,
    Expertise: ["Java", "Spring", "MongoDB"],
    DOB: "1995-04-15",
    Email_id: "ayush.kalaskar@oscorp.com",
    Contact: "9876543210",
    Address: [{ PAddr: "123, Street A, Pune", LAddr: "Maharashtra" }]
  },
  {
    Empid: 2,
    Name: { FName: "Himanshu", LName: "Patil" },
    Company_name: "Hammer Industries",
    Salary: 60000,
    Designation: "Developer",
    Age: 30,
    Expertise: ["JavaScript", "React", "Node.js"],
    DOB: "1993-06-25",
    Email_id: "himanshu.patil@hammerindustries.com",
    Contact: "9876543211",
    Address: [{ PAddr: "234, Street B, Bangalore", LAddr: "Karnataka" }]
  },
  {
    Empid: 3,
    Name: { FName: "Mehul", LName: "Patil" },
    Company_name: "Lex Corp.",
    Salary: 45000,
    Designation: "Tester",
    Age: 29,
    Expertise: ["Selenium", "Python"],
    DOB: "1994-08-12",
    Email_id: "mehul.patil@lexcorp.org",
    Contact: "9876543212",
    Address: [{ PAddr: "345, Street C, Hyderabad", LAddr: "Telangana" }]
  },
  {
    Empid: 4,
    Name: { FName: "Tanmay", LName: "Machkar" },
    Company_name: "Wayne Industries",
    Salary: 70000,
    Designation: "Project Manager",
    Age: 35,
    Expertise: ["Agile", "Scrum"],
    DOB: "1988-02-20",
    Email_id: "tanmay.machkar@batmobile.com",
    Contact: "9876543213",
    Address: [{ PAddr: "456, Street D, Chennai", LAddr: "Tamil Nadu" }]
  },
  {
    Empid: 5,
    Name: { FName: "Rajendra", LName: "Patil" },
    Company_name: "Stark Industries",
    Salary: 32000,
    Designation: "Programmer",
    Age: 27,
    Expertise: ["Java", "Angular"],
    DOB: "1996-03-30",
    Email_id: "rajendra.patil@starkindustries.com",
    Contact: "9876543214",
    Address: [{ PAddr: "567, Street E, Delhi", LAddr: "Delhi" }]
  }
])
```

```
    },
    {
      Empid: 6,
      Name: { FName: "Rajesh", LName: "Patil" },
      Company_name: "Roxonn",
      Salary: 50000,
      Designation: "Designer",
      Age: 32,
      Expertise: ["Photoshop", "Illustrator"],
      DOB: "1991-11-11",
      Email_id: "rajesh.patil@roxonn.com",
      Contact: "9876543215",
      Address: [{ PAddr: "678, Street F, Kolkata", LAddr: "West Bengal" }]
    },
    {
      Empid: 7,
      Name: { FName: "Prashant", LName: "Kalaskar" },
      Company_name: "Y-Space",
      Salary: 45000,
      Designation: "Tester",
      Age: 26,
      Expertise: ["Selenium", "Java"],
      DOB: "1997-07-07",
      Email_id: "prashant.kalaskar@y-space.com",
      Contact: "9876543216",
      Address: [{ PAddr: "789, Street G, Pune", LAddr: "Maharashtra" }]
    },
    {
      Empid: 8,
      Name: { FName: "Aditya", LName: "Gundeti" },
      Company_name: "SNASA",
      Salary: 80000,
      Designation: "Architect",
      Age: 33,
      Expertise: ["Cloud", "Microservices"],
      DOB: "1990-01-01",
      Email_id: "aditya.gundeti@snasa.org",
      Contact: "9876543217",
      Address: [{ PAddr: "890, Street H, Noida", LAddr: "Uttar Pradesh" }]
    },
    {
      Empid: 9,
      Name: { FName: "Manoj", LName: "Patil" },
      Company_name: "MEPA",
      Salary: 40000,
      Designation: "Developer",
      Age: 31,
      Expertise: ["C#", ".NET"],
      DOB: "1992-05-05",
      Email_id: "manoj.patil@mepa.com",
      Contact: "9876543218",
      Address: [{ PAddr: "901, Street I, Jaipur", LAddr: "Rajasthan" }]
    },
    {
      Empid: 10,
      Name: { FName: "Afan", LName: "Shaikh" },
      Company_name: "Vought",
      Salary: 39000,
      Designation: "HR",
      Age: 29,
      Expertise: ["Recruitment", "Employee Relations"],
      DOB: "1994-09-09",
      Email_id: "afan.shaikh@vought.com",
      Contact: "9876543219",
      Address: [{ PAddr: "1234, Street J, Ahmedabad", LAddr: "Gujarat" }]
```

## Queries

1. Select all documents where Designation is "Programmer" and Salary > 30000:

```
db.Employee.find({ Designation: "Programmer", Salary: { $gt: 30000 } })
```

2. Create a new document if no document contains {Designation: "Tester", Company\_name: "Y-Space", Age: 25}:

```
db.Employee.update(
  { Designation: "Tester", Company_name: "Y-Space", Age: 25 },
  { $setOnInsert: { Empid: 11, Name: { FName: "Anil", LName: "Salvi" }, Salary: 30000, DOB: "1998-01-01", Email_id: "anil.salvi@y-
  { upsert: true }
}
```

3. Select all documents where Age < 30 or Salary > 40000:

```
db.Employee.find({ $or: [{ Age: { $lt: 30 } }, { Salary: { $gt: 40000 } }] })
```

4. Match documents where Address contains city "Pune" and Pin\_code "411001":

```
db.Employee.find({ Address: { $elemMatch: { city: "Pune", Pin_code: "411001" } } })
```

5. Find all documents with `Company_name` "Oscorp" and modify their salary by 2000:

```
db.Employee.updateMany(
  { Company_name: "Oscorp" },
  { $inc: { Salary: 2000 } }
)
```

6. Find documents where Designation is not equal to "Developer":

```
db.Employee.find({ Designation: { $ne: "Developer" } })
```

7. Find \_id, Designation, Address, and Name where Company\_name is "Wayne Industries":

```
db.Employee.find(
  { Company_name: "Wayne Industries" },
  { _id: 1, Designation: 1, Address: 1, Name: 1 }
)
```

8. Select all documents where Designation is either "Developer" or "Tester":

```
db.Employee.find( { Designation: { $in: ["Developer", "Tester"] } })
```

9. Find all documents with exact match on Expertise array:

```
db.Employee.find({ Expertise: { $all: ["Cloud", "Microservices"] } })
```

10. Drop single documents where Designation is "Developer":

```
db.Employee.deleteMany({ Designation: "Developer" })
```