

Practical no. 3

MongoDB Queries: Design and Develop MongoDB Queries using CRUD operations.

C - Create Operations

```
1) b.Employee.insertOne({
... emp_id: 101,
... name: "Ravi Kumar",
... department: "Sales",
... salary: 65000,
... city: "Mumbai"
... });
{
  acknowledged: true,
  insertedId: ObjectId('69158635467295331163b112')
}

2) db.Employee.insertMany([
... {
... emp_id: 102,
... name: "Priya Sharma",
... department: "IT",
... salary: 82000,
... city: "Bengaluru"
... },
... {
... emp_id: 103,
... name: "Amit Joshi",
... department: "Sales",
... salary: 60000,
... city: "Mumbai"
... }
... ]);
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('69158785467295331163b113'),
    '1': ObjectId('69158785467295331163b114')
  }
}
```

R - Read Operation

```
1) db.Employee.find({});
```

```
[
```

```
  {
    _id: ObjectId('69158635467295331163b112'),
    emp_id: 101,
    name: 'Ravi Kumar',
    department: 'Sales',
    salary: 65000,
    city: 'Mumbai'
```

```

},
{
  _id: ObjectId('69158785467295331163b113'),
  emp_id: 102,
  name: 'Priya Sharma',
  department: 'IT',
  salary: 82000,
  city: 'Bengaluru'
},
{
  _id: ObjectId('69158785467295331163b114'),
  emp_id: 103,
  name: 'Amit Joshi',
  department: 'Sales',
  salary: 60000,
  city: 'Mumbai'
}
]

2) db.Employee.find({
... salary: {$gt: 70000}
... });
[
  {
    _id: ObjectId('69158785467295331163b113'),
    emp_id: 102,
    name: 'Priya Sharma',
    department: 'IT',
    salary: 82000,
    city: 'Bengaluru'
  }
]

3) db.Employee.find({
... department: "IT",
... city: "Bengaluru"
... });
[
  {
    _id: ObjectId('69158785467295331163b113'),
    emp_id: 102,
    name: 'Priya Sharma',
    department: 'IT',
    salary: 82000,
    city: 'Bengaluru'
  }
]

```

U – Update Operations

```

1) db.Employee.updateOne(
... {emp_id: 103},
... { $set: {department: "Marketing"}}
... );

```

```
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}

2) db.Employee.find({ emp_id: 103 });
[
  {
    _id: ObjectId('69158785467295331163b114'),
    emp_id: 103,
    name: 'Amit Joshi',
    department: 'Marketing',
    salary: 60000,
    city: 'Mumbai'
  }
]

3) db.Employee.updateMany(
... { city: "Bengaluru" },
... { $inc: {salary: 5000} }
... );
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}

4) db.Employee.find(
... {
...   city: "Bengaluru"
... }
... );
[
  {
    _id: ObjectId('69158785467295331163b113'),
    emp_id: 102,
    name: 'Priya Sharma',
    department: 'IT',
    salary: 87000,
    city: 'Bengaluru'
  }
]
```

D - Delete Operation

```
1) db.Employee.deleteOne(  
... {  
...   emp_id: 103  
... }  
... );  
{ acknowledged: true, deletedCount: 1 }  
  
2) db.Employee.deleteMany(  
... {  
...   city: "Mumbai"  
... }  
... );  
{ acknowledged: true, deletedCount: 3 }  
  
3) db.Employee.drop();  
true
```