

## LAB-2

1. Insert at least five documents in each collection using all three methods of insertion.{ Show update method using upsert set to true and set to false}

The screenshot shows the Robo 3T - 1.4 interface. On the left, the 'Collections (2)' folder is expanded, showing 'Department' and 'Employee' collections. The 'Employee' collection is selected. The main window displays the 'Employee' collection with a table view showing 5 documents. The documents are:

| Key     | Name  | Age | Gender | deptNo |
|---------|-------|-----|--------|--------|
| (1) 1.0 | Anil  | 31  | M      | 1001   |
| (2) 2.0 | Ajay  | 25  | M      | 1001   |
| (3) 3.0 | Rekha | 20  | F      | 1002   |
| (4) 4.0 | Samar | 33  | M      | 1006   |
| (5) 5.0 |       |     |        |        |

The 'Logs' tab at the bottom shows the following command:

```
db.Employee.insert({_id:1,Name:"Anil",Age:31,Gender:"M",deptNo:1001});
db.Employee.insert({_id:2,Name:"Ajay",Age:25,Gender:"M",deptNo:1001});
db.Employee.insert({_id:3,Name:"Rekha",Age:20,Gender:"F",deptNo:1002});
db.Employee.insert({_id:4,Name:"Samar",Age:33,Gender:"M",deptNo:1006});
```

The screenshot shows the Robo 3T - 1.4 interface. On the left, the 'Collections (2)' folder is expanded, showing 'Department' and 'Employee' collections. The 'Employee' collection is selected. The main window displays the 'Employee' collection with a table view showing 5 documents. The documents are:

| Key     | Name  | Age | Gender | deptNo |
|---------|-------|-----|--------|--------|
| (1) 1.0 | Anil  | 31  | M      | 1001   |
| (2) 2.0 | Ajay  | 25  | M      | 1001   |
| (3) 3.0 | Rekha | 20  | F      | 1002   |
| (4) 4.0 | Samar | 33  | M      | 1006   |
| (5) 5.0 | Priya | 35  | F      | 1007   |

The 'Logs' tab at the bottom shows the following command:

```
update({_id:5,Name:"Priya",Age:35},{ $set:{Gender:"F",deptNo:1007}}, {upsert:false});
```

Updated 1 existing record(s) in 3ms

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
- config
- mydb

db.getCollection("Department").find({})

db.Employee.update({\_id:5,Name:"Priya",Age:35},{ \$set: {Gender:"F",deptNo:1007}}, {upsert:false});

Employee 0.001 sec.

| Key       | Value        | Type   |
|-----------|--------------|--------|
| > (1) 1.0 | { 5 fields } | Object |
| > (2) 2.0 | { 5 fields } | Object |
| > (3) 3.0 | { 5 fields } | Object |
| > (4) 4.0 | { 5 fields } | Object |
| > (5) 5.0 | { 5 fields } | Object |
| _id       | 5.0          | Double |
| Name      | Priya        | String |
| Age       | 35.0         | Double |
| Gender    | F            | String |
| deptNo    | 1007.0       | Double |

Logs

## 2.Update 'Employee' collection to add new field to an existing document .

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
- config
- mydb

db.getCollection("Department").find({})

db.Employee.update({\_id:1},{ \$set: {Age:33}});

Employee 0.001 sec.

| Key       | Value        | Type   |
|-----------|--------------|--------|
| > (1) 1.0 | { 5 fields } | Object |
| _id       | 1.0          | Double |
| Name      | Anil         | String |
| Age       | 33.0         | Double |
| Gender    | M            | String |
| deptNo    | 1001.0       | Double |
| > (2) 2.0 | { 5 fields } | Object |
| > (3) 3.0 | { 5 fields } | Object |
| > (4) 4.0 | { 5 fields } | Object |
| > (5) 5.0 | { 6 fields } | Object |

Logs

## 3. Remove a field from an existing document.

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
  - config
  - mydb

db.getCollection('Department').find({})

db.Employee.remove({Age:{\$lt:21}});

Employee 0.001 sec.

| Key     | Value        | Type   |
|---------|--------------|--------|
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (2) 2.0 | { 5 fields } | Object |
| id      | 2.0          | Double |
| Name    | Ajay         | String |
| Age     | 25.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (3) 4.0 | { 5 fields } | Object |
| id      | 4.0          | Double |
| Name    | Samar        | String |
| Age     | 33.0         | Double |
| Gender  | M            | String |
| deptNo  | 1006.0       | Double |
| (4) 5.0 | { 6 fields } | Object |
| id      | 5.0          | Double |
| Name    | Priya        | String |
| Age     | 35.0         | Double |
| Gender  | F            | String |
| deptNo  | 1007.0       | Double |

Logs

4. Select all documents from both collections.

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
  - config
  - mydb

db.getCollection('Department').find({})

db.getCollection('Department').find({})

Department 0.001 sec.

| Key        | Value        | Type   |
|------------|--------------|--------|
| (1) 1001.0 | { 3 fields } | Object |
| id         | 1001.0       | Double |
| Name       | IT           | String |
| ManageName | Rekha        | String |
| (2) 1002.0 | { 3 fields } | Object |
| id         | 1002.0       | Double |
| Name       | IT           | String |
| ManageName | Rekha        | String |
| (3) 1003.0 | { 3 fields } | Object |
| id         | 1003.0       | Double |
| Name       | Finance      | String |
| ManageName | Priya        | String |
| (4) 1004.0 | { 3 fields } | Object |
| id         | 1004.0       | Double |
| Name       | Finance      | String |
| ManageName | Ajay         | String |
| (5) 1007.0 | { 3 fields } | Object |
| id         | 1007.0       | Double |
| Name       | Managing     | String |
| ManageName | Bharat       | String |

Logs

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
- config
- mydb

Welcome db.getCollection('Department').find({}) db.getCollection('Employee').find({})

New Connection localhost:27017 Company

```
db.getCollection('Employee').find({})
```

Employee 0.001 sec.

| Key     | Value        | Type   |
|---------|--------------|--------|
| (1) 1.0 | { 5 fields } | Object |
| _id     | 1.0          | Double |
| Name    | Anil         | String |
| Age     | 33.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (2) 2.0 | { 5 fields } | Object |
| _id     | 2.0          | Double |
| Name    | Ajay         | String |
| Age     | 25.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (3) 4.0 | { 5 fields } | Object |
| _id     | 4.0          | Double |
| Name    | Samar        | String |
| Age     | 33.0         | Double |
| Gender  | M            | String |
| deptNo  | 1006.0       | Double |
| (4) 5.0 | { 6 fields } | Object |
| _id     | 5.0          | Double |

Logs

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
- config
- mydb

Welcome db.c... db.Employee... db.get... \* db.Employee... \* db.Employee... \* db.Employee... db.get... \* db.Employee...

New Connection localhost:27017 Company

```
db.getCollection('Employee').find({})
```

Employee 0.001 sec.

| Key     | Value        | Type   |
|---------|--------------|--------|
| (1) 1.0 | { 5 fields } | Object |
| _id     | 1.0          | Double |
| Name    | Anil         | String |
| Age     | 31.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (2) 2.0 | { 5 fields } | Object |
| _id     | 2.0          | Double |
| Name    | Ajay         | String |
| Age     | 25.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (3) 3.0 | { 5 fields } | Object |
| _id     | 3.0          | Double |
| Name    | Rekha        | String |
| Age     | 20.0         | Double |
| Gender  | F            | String |
| deptNo  | 1002.0       | Double |
| (4) 4.0 | { 5 fields } | Object |
| _id     | 4.0          | Double |

Logs

6. Select employee documents whose name begins with 'A';

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
  - config
  - mydb

Welcome | \* db.c... | \* db.Employee... | db.get... | \* db.Employee... | \* db.Employee... | \* db.Employee... | db.get... | \* db.Employee...

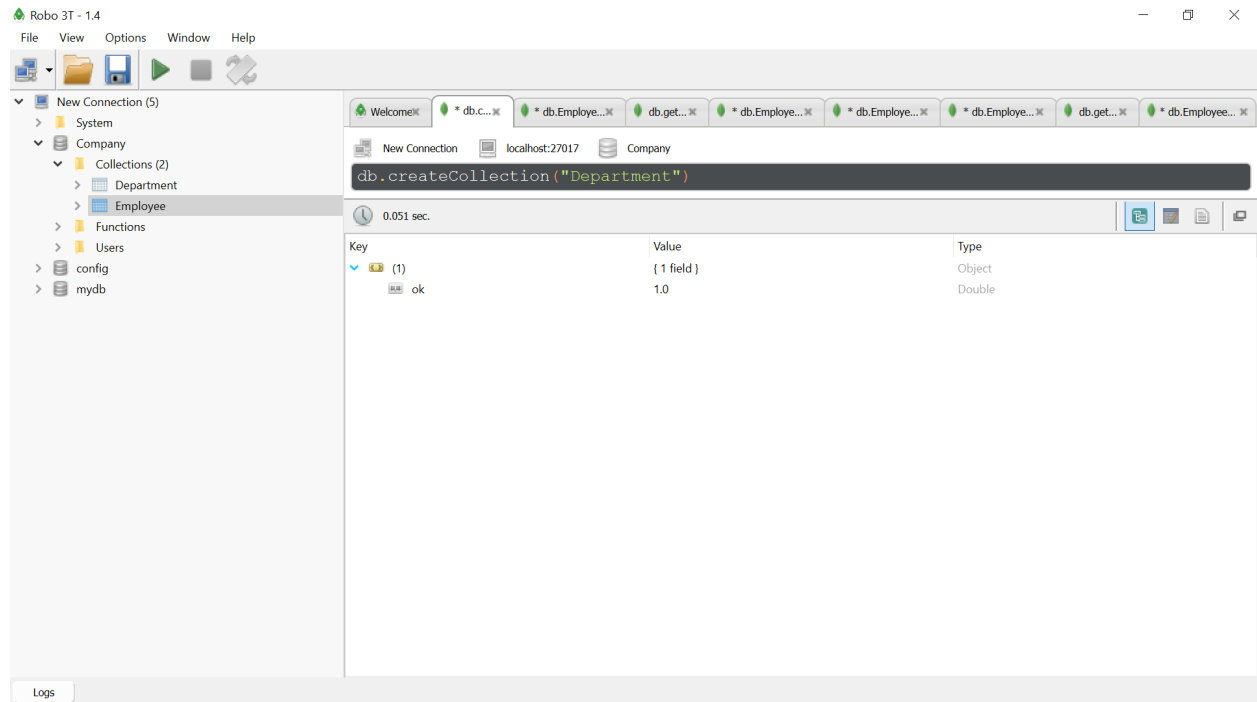
New Connection | localhost:27017 | Company

```
db.Employee.find({Name:/^A/}).pretty();
```

Employee 0.012 sec.

| Key       | Value        | Type   |
|-----------|--------------|--------|
| ▼ (1) 1.0 | { 5 fields } | Object |
| _id       | 1.0          | Double |
| Name      | Anil         | String |
| Age       | 31.0         | Double |
| Gender    | M            | String |
| deptNo    | 1001.0       | Double |
| ▼ (2) 2.0 | { 5 fields } | Object |
| _id       | 2.0          | Double |
| Name      | Ajay         | String |
| Age       | 25.0         | Double |
| Gender    | M            | String |
| deptNo    | 1001.0       | Double |

Logs



5. Select only employee name and department number whose department number falls between 1001 to 1005.

Robo 3T - 1.4

File View Options Window Help

New Connection (5)

- System
- Company
  - Collections (2)
    - Department
    - Employee
  - Functions
  - Users
- config
- mydb

Welcome | \* db.c... | \* db.Employee... | db.get... | \* db.Employee... | \* db.Employee... | \* db.Employee... | db.get... | \* db.Employee...

New Connection | localhost:27017 | Company

```
db.Employee.find({deptNo:{$in:[1001,1002,1003,1004,1005]}});
```

Employee 0.012 sec. 0 50

| Key       | Value        | Type   |
|-----------|--------------|--------|
| ▼ (1) 1.0 | { 5 fields } | Object |
| _id       | 1.0          | Double |
| Name      | Anil         | String |
| Age       | 31.0         | Double |
| Gender    | M            | String |
| deptNo    | 1001.0       | Double |
| ▼ (2) 2.0 | { 5 fields } | Object |
| _id       | 2.0          | Double |
| Name      | Ajay         | String |
| Age       | 25.0         | Double |
| Gender    | M            | String |
| deptNo    | 1001.0       | Double |
| ▼ (3) 3.0 | { 5 fields } | Object |
| _id       | 3.0          | Double |
| Name      | Rekha        | String |
| Age       | 20.0         | Double |
| Gender    | F            | String |
| deptNo    | 1002.0       | Double |

Logs

7. Select employee document s whose age is greater than 30.

Robo 3T - 1.4

FileViewOptionsWindowHelp

New Connection (5)

System

Company

Collections (2)

Department

Employee

Functions

Users

config

mydb

Welcome

\* db.c...

\* db.Employee...

db.get...

\* db.Employee...

\* db.Employee...

\* db.Employee...

\* db.get...

\* db.Employee...

New Connectionlocalhost:27017Company

db.Employee.find({Age:{\$gt:30}}).pretty();

Employee0.039 sec.

050

| Key     | Value        | Type   |
|---------|--------------|--------|
| (1) 1.0 | { 5 fields } | Object |
| _id     | 1.0          | Double |
| Name    | Anil         | String |
| Age     | 31.0         | Double |
| Gender  | M            | String |
| deptNo  | 1001.0       | Double |
| (2) 4.0 | { 5 fields } | Object |
| _id     | 4.0          | Double |
| Name    | Samar        | String |
| Age     | 33.0         | Double |
| Gender  | M            | String |
| deptNo  | 1006.0       | Double |
| (3) 5.0 | { 5 fields } | Object |
| _id     | 5.0          | Double |
| Name    | Priya        | String |
| Age     | 35.0         | Double |
| Gender  | F            | String |
| deptNo  | 1006.0       | Double |

Logs