

## ADVANCED DBMS LAB

### Experiment No: 8

### Aim

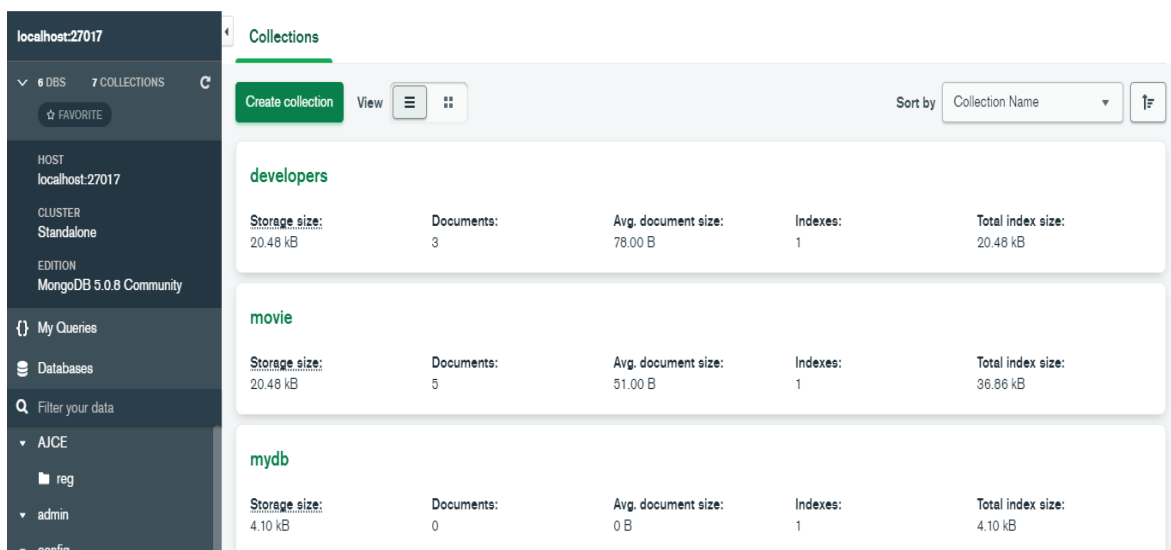
Create database and Practice CRUD operations

### Procedure

**Step1:** Create data base and inert tables.

```
use my_project_db
show dbs
db.createCollection("mydb")
db.createCollection("movie")
db.movie.insert({"name":"Avengers: Endgame"})
db.movie.insert(
[
  {"name": "Avengers: Infinity War" },
  {"name": "Avengers: Endgame" }
]
)
db.developers.insertMany(
[
  { _id: 20, devname: "John Wick", tools: "Visual Studio", born: 1948 },
  { _id: 21, devname: "Ganesh Roy", tools: "Net Beans", born: 1945 },
  { _id: 22, devname: "Deeksha Raul", tools: "Unity 3D", born: 1954 }
]
)
```

### Output



The screenshot shows the MongoDB Compass interface. On the left, a sidebar displays the connection to 'localhost:27017' and a list of collections: '6 DBS' and '7 COLLECTIONS'. The main area shows three collections: 'developers', 'movie', and 'mydb'. Each collection card displays its storage size, number of documents, average document size, number of indexes, and total index size.

Collection Name	Storage size	Documents	Avg. document size	Indexes	Total index size
developers	20.48 kB	3	78.00 B	1	20.48 kB
movie	20.48 kB	5	51.00 B	1	36.86 kB
mydb	4.10 kB	0	0 B	1	4.10 kB

## my\_project\_db.developers

Documents Aggregations Schema Explain Plan

**FILTER** { field: 'value' }

**ADD DATA** **VIEW**

```

_id: 20
devname: "John Wick"
tools: "Visual Studio"
born: 1948
  
```

```

_id: 21
devname: "Ganesh Roy"
tools: "Net Beans"
born: 1945
  
```

```

_id: 22
devname: "Deeksha Raul"
tools: "Unity 3D"
born: 1954
  
```

### CRUD operation

**Step 2:** Create or insert operations add new documents to a collection.

```
db.details.insertOne({name:"Rohit",age:"27",status:"pending"})
```

## my\_project\_db.details

Documents Aggregations Schema Explain

**FILTER** { field: 'value' }

**ADD DATA** **VIEW**

```

_id: ObjectId('6299a1bc72827db52d6db9de')
name: "Rohit"
age: "27"
status: "pending"
  
```

```
db.details.insertMany([
  {name:"Rohit",age:"27",status:"pending"},
  {name:"Aswathy",age:22,status:"pending"},
  {name:"Aswin",age:26,status:"pending"}
])
```

**Output:**

```

_id: ObjectId('6299a27372827db52d6db9df')
name: "Rohit"
age: "27"
status: "pending"

```

```

_id: ObjectId('6299a27372827db52d6db9e0')
name: "Aswathy"
age: 22
status: "pending"

```

```

_id: ObjectId('6299a27372827db52d6db9e1')
name: "Aswin"
age: 26
status: "pending"

```

**Step 3:** Read operations retrieve documents from a collection

```
db.details.find({age:{$gt:25}},{name:1,address:1}).limit(5)
```

**Output:**

```

> db.details.find({age:{$gt:25}},{name:1,address:1}).limit(5)
{ "_id" : ObjectId("6299a27372827db52d6db9e1"), "name" : "Aswin" }
>

```

**Step 4:** Update operations, which modify existing documents in a collection.

```
db.details.updateMany({age:{$gt:25}},{ $set:{status:"reject"}})
```

**Output:**

```

> db.details.updateMany({age:{$gt:25}},{ $set:{status:"reject"}})
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
>

```

```

_id: ObjectId('6299a27372827db52d6db9df')
name: "Rohit"
age: "27"
status: "pending"

```

```

_id: ObjectId('6299a27372827db52d6db9e0')
name: "Aswathy"
age: 22
status: "pending"

```

```

_id: ObjectId('6299a27372827db52d6db9e1')
name: "Aswin"
age: 26
status: "reject"

```

```
db.details.updateOne({name:"Aswathy"},{$set:{status:"selected"}})
```

Output:

```
db.details.updateOne({name:"Aswathy"},{$set:{status:"selected"}})
"acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
```

```
_id: ObjectId('6299a27372827db52d6db9e0')
name: "Aswathy"
age: 22
status: "selected"
```

**Step 5:** Delete operations, which remove documents from a collection.

```
db.details.deleteMany({status:"reject"})
```

Output:

```
> db.details.deleteMany({status:"reject"})
{ "acknowledged" : true, "deletedCount" : 1 }
```

```
_id: ObjectId('6299a27372827db52d6db9df')
name: "Rohit"
age: "27"
status: "pending"
```

```
_id: ObjectId('6299a27372827db52d6db9e0')
name: "Aswathy"
age: 22
status: "pending"
```

```
db.details.deleteOne({name:"Rohit"})
```

Output;

```
db.details.deleteOne({name:"Rohit"})
"acknowledged" : true, "deletedCount" : 1 }
```

```
_id: ObjectId('6299a27372827db52d6db9e0')
name: "Aswathy"
age: 22
status: "pending"
```