

04/03

Lab-1

Working with MongoDB

I. Create Database in MongoDB

use myDB;

Confirm the existence of your database db;

To list all databases
show dbs;

II. CRUD (Create, Read, Update, Delete) Operation

1. To create a collection

db.createCollection("Student");

2. To drop a collection

db.student.drop();

3. Insert the following data into Student

db.student.insert({id: "StudName": "Michelle Jacintha", Grade: "VII", Hobbies: "Internet Surfing"});

4. Insert the document for "Aryan David" in to the Student collection only if it does not already exist in the collection. However if it is already present, then update the document.

```
db.student.update({-id:3, studName: "Aryan David", grade: "VII"}, {$set: {hobbies: "skating"}, {$unset: {report: true}});
```

5. Find Method

A. To search for documents from the collection based on certain search criteria

```
db.student.find({studName: "Aryan David"})
```

B.

```
db.student.find({$? : {studName: 1} grade: 1, id: 0})
```

;

C.

```
db.student.find({grade: {$eq: 'VII'}})
```

;

D.

```
db.student.find({hobbies: {$in: ['chess', 'skating']}})
```

;

E.

```
db.student.find({studName: /"M"/})
```

;

F.

```
db.student.find({studName: /e/})
```

;

G.

```
db.student.count()
```

;

H.

```
db.student.find().sort({studName: -1})
```

;

III Import data from a CSV file

```
mongoimport --db student --collection air  
lines --type csv --headerline --file/home  
/hduser/Desktop/airline.csv
```


IV Export data to a CSV file

```
mongoexport --host localhost --db student
--collection airline --csv --out/home/
hdiuse/Desktop/output.txt --fields "Year"
"Quarter"
```

V save Method

save() method will insert a new document

```
db.student.save({studName: "Varun",
grade: "VI" })
```

VI Add a new field to existing Document.

```
db.students.update({_id: 4}, {$set: {
Location: "Network" }})
```

VII Remove the field in an existing Document

```
db.Student.update({_id: 4}, {$unset: {
Location: "Network" }}).
```

VIII Finding Document based on search criteria suppressing some fields

```
db.Student.find({_id: 1}, {studName: 1,
grade: 1, _id: 0 });
```

```
db.Student.find({grade: {$ne: 'VII' }}).
```

```
db.Student.find({studName: /s$/}).
```

to set a particular field
value to null

IX

db.Students.update({_id: 3}, { \$set: {
location: null } })

X

count the number of documents in
Student collection.

db.Student.count()

XI

Count the number of documents in
Student collection with grade VII

db.student.count({ grade: "VII" })

Retrieve:

db.Students.find({ grade: "VII" }, limit(3)

Sort the document in ascending order.

db.Students.find().sort({ StudName: 1 }).

Descending order:

db.Student.find().sort({ StudName: -1 }).

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