

# **Internet And Web Programming Lab**

# **Assessment VI**

Slot:-L53+L54

Faculty:- SRIDHAR RAJ Sir

Submitted by:-

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# Ques 1. Insert: Create a minimum of TWO collections and insert at least 10 documents in each of the collection.

Code to create database called mydb:

### db.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/mydb";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  console.log("Database created!");
  db.close();
});
```

#### Screenshots:-

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Developmen $ npm install mongodb

added 20 packages, and audited 21 packages in 5s

3 packages are looking for funding run `npm fund` for details

found 0 vulnerabilities

Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Developmen $ node db.js
Database created!
```

```
> show dbs
admin 0.000GB
config 0.000GB
local 0.000GB
mydb 0.000GB
```

#### Code to create Collections:-

#### Collection.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("mydb");
dbo.createCollection("Cats", function(err, res) {
if (err) throw err:
console.log("Collection created!");
db.close();
});
});
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("mydb");
dbo.createCollection("Users", function(err, res) {
if (err) throw err;
console.log("Collection created!");
db.close();
});
});
```

#### Screenshots:-

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/iwp_6
$ node db.js
Database created!

Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/iwp_6
$ node collection.js
Collection created!
Collection created!
```

```
> show dbs
admin
       0.000GB
config 0.000GB
local
       0.000GB
> show collections
> show dbs
admin
       0.000GB
config 0.000GB
local
       0.000GB
mydb
       0.000GB
> use mydb
switched to db mydb
> show collections
Cats
Users
```

## Code to insert documents in each collection:-

#### Cats.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("mydb");
var myobj = [
{ catName: 'Kiara', ownerName: 'Taiba', Gender: 'F'},
{ catName: 'Scarlet', ownerName: 'Nitish', Gender: 'F'},
{ catName: 'Rio', ownerName: 'Ethan', Gender: 'M'},
{ catName: 'Rue', ownerName: 'Ethan', Gender: 'M'},
{ catName: 'Cia', ownerName: 'Rohini', Gender: 'F'},
{ catName: 'Dio', ownerName: 'Ashish', Gender: 'F'},
{ catName: 'Rio', ownerName: 'Ashish', Gender: 'F'},
{ catName: 'Kio', ownerName: 'Ashish', Gender: 'M'},
 catName:'Skie',ownerName:'Hemant',Gender:'M'},
 catName:'Neko',ownerName:'Suman',Gender:'M'}
dbo.collection("Cats").insertMany(myobj, function(err, res) {
```

```
if (err) throw err;
console.log("Number of documents inserted: " + res.insertedCount);
db.close();
});
});
```

Screenshots:-

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ ls cats.js collection.js db.js node_modules/ package.json package-lock.json

Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ node cats.js

Number of documents inserted: 10

Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ []
```

```
> db.Cats.find()
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a47e"), "catName" : "Kiara", "ownerName" : "
Taiba", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a447f"), "catName" : "Scarlet", "ownerName" : "Nitish", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a480"), "catName" : "Rio", "ownerName" : "Ethan", "Gender" : "M" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a481"), "catName" : "Rue", "ownerName" : "Ethan", "Gender" : "M" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a482"), "catName" : "Cia", "ownerName" : "Rohini", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a483"), "catName" : "Dio", "ownerName" : "Ashish", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a484"), "catName" : "Rio", "ownerName" : "Ashish", "Gender" : "M" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a485"), "catName" : "Skie", "ownerName" : "Hemant", "Gender" : "M" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a486"), "catName" : "Skie", "ownerName" : "Suman", "Gender" : "M" }
```

#### Users.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
   if (err) throw err;
   var dbo = db.db("mydb");
   var myobj = [
   { UserName: 'Taiba',Gender: 'F',password: '123'},
   { UserName: 'Nitish',Gender: 'F',password: '123'},
   { UserName: 'Ethan',Gender: 'M',password: '123'},
}
```

```
{ UserName: 'Ethan', Gender: 'M', password: '123'},
{ UserName: 'Rohini', Gender: 'F', password: '123'},
{ UserName: 'Ashish', Gender: 'F', password: '123'},
{ UserName: 'Ashish', Gender: 'M', password: '123'},
{ UserName: 'Hemant', Gender: 'M', password: '123'},
{ UserName: 'Suman', Gender: 'M', password: '123'}
};
dbo.collection("Users").insertMany(myobj, function(err, res) {
if (err) throw err;
console.log("Number of documents inserted: " + res.insertedCount);
db.close();
});
});
```

Screenshots:-

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ node users.js
Number of documents inserted: 10
```

```
db.Users.find()
                                                                "Taiba", "Gender" :
"Nitish", "Gender" :
"Ethan", "Gender" :
  id" : ObjectId("6260ded77173bde2e8ba934a"),
                                                  "UserName" :
                                                                                             "password" :
                                                                                                           "123"
                                                  "UserName"
  id" : ObjectId("6260ded77173bde2e8ba934b"),
                                                                                              "password"
                                                                 "Ethan",
"Ethan",
"Rohini",
                                                  "UserName"
                                                                                             "password"
  id" : ObjectId("6260ded77173bde2e8ba934c"
      : ObjectId("6260ded77173bde2e8ba934d"),
                                                  "UserName"
                                                                          "Gender"
                                                                                             'password'
      : ObjectId("6260ded77173bde2e8ba934e"),
                                                  "UserName"
                                                                            "Gender"
      : ObjectId("6260ded77173bde2e8ba934f"),
                                                                 "Ashish",
                                                  "UserName"
                                                                           "Gender"
                                                                                               password"
                                                                 "Ashish", "Gender"
      : ObjectId("6260ded77173bde2e8ba9350"),
                                                  "UserName"
                                                                                              'password"
                                                                 "Ashish", "Gender"
  id" : ObjectId("6260ded77173bde2e8ba9351"),
                                                                                             "password"
                                                  "UserName" :
                                                                 "Hemant", "Gender"
                                                                                             "password"
  id" : ObjectId("6260ded77173bde2e8ba9352"),
                                                  "UserName" :
       : ObjectId("6260ded77173bde2e8ba9353"),
                                                  "UserName" :
                                                                "Suman",
                                                                          "Gender" :
                                                                                             "password" :
```

# Ques 2. Update: Minimum of THREE different fields should be updated. Display both the old and updated values.

Code to update:-

### Update.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://127.0.0.1:27017/";
MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("mydb");
var myquery = {ownerName:'Taiba' };
var newvalues = { $set: {catName: 'Lyari',ownerName: 'Amreen', Gender: 'M'}};
var myquery = { ownerName:'Nitish' };
var newvalues = { $set: {catName:'Scom',ownerName:'Manish',Gender:'M'}};
var myquery = { ownerName: 'Ethan' };
var newvalues = { $set: {catName:'Rim',ownerName:'Aiden',Gender:'M'}};
dbo.collection("Cats").updateMany(myquery, newvalues, function(err, res) {
if (err) throw err;
console.log("4 document updated");
db.close();
});
});
```

Screenshots:-

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ node update.js 4 document updated
```

#### Old values:-

```
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a47e"), "catName" : "Kiara", "ownerName" : "
Taiba", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a47f"), "catName" : "Scarlet", "ownerName" : "Nitish", "Gender" : "F" }
{ "_id" : ObjectId("6260ddaf95b9b6187cf8a480"), "catName" : "Rio", "ownerName" : "Ethan", "Gender" : "M" }
```

## **Updated values:-**

```
> db.Cats.find()
{ "_id" : ObjectId("6260e1b38bc562c3b0181642"), "catName" : "Lyari", "ownerName" : "Amreen", "Gender" : "M" }
{ "_id" : ObjectId("6260e1b38bc562c3b0181643"), "catName" : "Scom", "ownerName" : "Manish", "Gender" : "M" }
{ "_id" : ObjectId("6260e1b38bc562c3b0181644"), "catName" : "Rim", "ownerName" : "Aiden", "Gender" : "M" }
{ "_id" : ObjectId("6260e1b38bc562c3b0181645"), "catName" : "Rim", "ownerName" : "Aiden", "Gender" : "M" }
```

Ques 3. Delete: Delete a document by referring to a specific attribute of the document.

#### Code to delete a document:-

#### Delete.js:-

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
   if (err) throw err;
   var dbo = db.db("mydb");
   var myquery = { ownerName:'Amreen' };
   dbo.collection("Cats").deleteOne(myquery, function(err, obj) {
      if (err) throw err;
      console.log("1 document has been deleted");
      db.close();
   });
});
```

```
Nitish@DESKTOP-S300ICG MINGW64 /d/Users/LENOVO/Desktop/Development/WEBDev2021/Iwp_6 $ node delete.js 1 document has been deleted
```

After deleting we are left with 9 documents, document with ownerName "Amreen" is deleted:-

Screenshots:-

```
'_id" : ObjectId("6260e1b38bc562c3b0181643"),
'_id" : ObjectId("6260e1b38bc562c3b0181644"),
                                                                            'catName
                                                                           "catName"
                                                                                              "Rim",
                                                                                                          "ownerName"
                                                                                                                                "Aiden",
"Rim",
"Cia",
                                                                                                                                "Aiden",
"Rohini"
                                                                           "catName"
                                                                                                          "ownerName"
                                                                          "catName"
                                                                                              "Dio",
                                                                           "catName"
                                                                                                         "ownerName"
                                                                                                                                "Ashish",
_id : ObjectId( 6260e1b38bc562c3b0181647 ),

"_id" : ObjectId("6260e1b38bc562c3b0181648"),

"_id" : ObjectId("6260e1b38bc562c3b0181649"),

"_id" : ObjectId("6260e1b38bc562c3b018164e"),

"_id" : ObjectId("6260e1b38bc562c3b018164b"),
                                                                                                                                "Ashish",
                                                                          "catName"
                                                                                                         "ownerName"
                                                                                              "Rio",
                                                                                                                               "Ashish",
"Hemant",
                                                                          "catName"
                                                                                              "Kio",
"Skie"
                                                                                                         "ownerName"
                                                                          "catName"
                                                                                                                                                 "Gender
                                                                                                           "ownerName
                                                                          "catName"
```

Ques 4. Drop: Drop the first collection and display the entire data present in the left out collection.

Commands to drop collection from database:-

```
> show collections
Cats
Users
> db.Cats.drop()
true
> show collections
Users
> db.Users.find()
                                                                                     "Taiba",
"Nitish",
   "_id" : ObjectId("6260ded77173bde2e8ba934a"),
                                                                   "UserName" :
                                                                                                                         "password" :
   __id" : ObjectId("6260ded77173bde2e8ba934b"),
                                                                   "UserName"
                                                                                                                          "password"
                                                                                                   "Gender"
                                                                                                                                            "123"
                                                                                     "Ethan",
   "_id" : ObjectId("6260ded77173bde2e8ba934c"),
                                                                   "UserName"
                                                                                                  "Gender" :
                                                                                                                         "password" :
                                                                                                                                          "123"
                                                                                                                  "M",
     id": ObjectId("6260ded77173bde2e8ba934d"),
id": ObjectId("6260ded77173bde2e8ba934e"),
id": ObjectId("6260ded77173bde2e8ba934f"),
id": ObjectId("6260ded77173bde2e8ba9350"),
                                                                                     "Ethan",
"Rohini",
     id"
                                                                   "UserName"
                                                                                                  "Gender"
                                                                                                                         "password"
                                                                                                                                            123
                                                                   "UserName"
                                                                                                    "Gender
                                                                                                                          "password"
                                                                                     "Ashish",
                                                                   "UserName"
                                                                                                   "Gender
                                                                                                                           'password"
                                                                   "UserName"
                                                                                                                          "password"
                                                                                     "Ashish",
                                                                                                   "Gender"
          : ObjectId("6260ded77173bde2e8ba9351"),
: ObjectId("6260ded77173bde2e8ba9352"),
: ObjectId("6260ded77173bde2e8ba9352"),
                                                                                     "Ashish",
                                                                                                   "Gender"
                                                                                                                         "password"
     id"
                                                                   "UserName"
                                                                                                                                            "123'
                                                                                                                  "M", "password"
M", "password"
                                                                   "UserName"
                                                                                                   "Gender"
                                                                                                                         "password"
                                                                                      "Hemant",
                                                                                                                                            "123"
                                                                                                  "Gender"
                                                                   "UserName"
                                                                                     "Suman",
```