

Week 1 – MONGO Database(No SQL)

Name: Divyanshu Sharma

SRN: PES1UG20CS806

Problem Statement	<p>Use MongoDB and create a sample database and perform the following operations on it</p> <ol style="list-style-type: none"> 1. Create documents with varying fields. 2. Use the insert and save commands. 3. Drop an existing database and a collection and use remove() to delete documents. 4. Update an existing document in a collection. (update()) 5. Use find () and findOne () for querying the database.
--------------------------	---

1.Create Operations:

```
> use student
switched to db student
> db
student
> db.createCollection("Student_info");
{ "ok" : 1 }
> show collections
Student_info
> db.Student_info.insertMany([
... {fname: 'kunal', lname: 'singh', ssn: '801', addr: 'kanpur'},
... {fname: 'dev', lname: 'dixit', ssn: '802', addr: 'bhopal'},
... {fname: 'kumar', lname: 'vivek', ssn: '803', addr: 'mandya'},
... {fname: 'raj', lname: 'singh', ssn: '804', addr: 'bangalore'}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("61478db2fd93eea0d098561a"),
    ObjectId("61478db2fd93eea0d098561b"),
    ObjectId("61478db2fd93eea0d098561c"),
    ObjectId("61478db2fd93eea0d098561d")
  ]
}
```

2. Insert Command:

```
> db.Student_info.insertMany([
... {fname: 'kunal', lname: 'singh', ssn: '801', addr: 'kanpur'},
... {fname: 'dev', lname: 'dixit', ssn: '802', addr: 'bhopal'},
... {fname: 'kumar', lname: 'vivek', ssn: '803', addr: 'mandya'},
... {fname: 'raj', lname: 'singh', ssn: '804', addr: 'bangalore'}])
{
  "acknowledged" : true,
  "insertedIds" : [
    ObjectId("61478db2fd93eea0d098561a"),
    ObjectId("61478db2fd93eea0d098561b"),
    ObjectId("61478db2fd93eea0d098561c"),
    ObjectId("61478db2fd93eea0d098561d")
  ]
}
```

3. Remove() to delete documents And Drop Command:

```
> db.Student_info.remove({fname: 'raj'})
WriteResult({ "nRemoved" : 1 })
> db.Student_info.find()
{ "_id" : ObjectId("61478db2fd93eea0d098561a"), "fname" : "Abishek" }
{ "_id" : ObjectId("61478db2fd93eea0d098561b"), "fname" : "dev", "lname" : "dixit", "ssn" : "802", "addr" : "bhopal" }
{ "_id" : ObjectId("61478db2fd93eea0d098561c"), "fname" : "kumar", "lname" : "vivek", "ssn" : "803", "addr" : "mandya" }
>
```

DROP Command:

```
> db
student
> db.dropDatabase()
{ "dropped" : "student", "ok" : 1 }
```

4. Update Command:

```
> db.Student_info.update({fname: 'kunal'}, {fname: 'Abishek'})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

After update:

```
> db.Student_info.find({fname: 'Abishek'})
{ "_id" : ObjectId("61478db2fd93eea0d098561a"), "fname" : "Abishek" }
```

5. Use find () Command:

```
> db.Student_info.find()
{ "_id" : ObjectId("61478db2fd93eea0d098561a"), "fname" : "kunal", "lname" : "singh", "ssn" : "801", "addr" : "kanpur" }
{ "_id" : ObjectId("61478db2fd93eea0d098561b"), "fname" : "dev", "lname" : "dixit", "ssn" : "802", "addr" : "bhopal" }
{ "_id" : ObjectId("61478db2fd93eea0d098561c"), "fname" : "kumar", "lname" : "vivek", "ssn" : "803", "addr" : "mandya" }
{ "_id" : ObjectId("61478db2fd93eea0d098561d"), "fname" : "raj", "lname" : "singh", "ssn" : "804", "addr" : "bangalore" }
```