Chit 15 –

• Create database Institute.

use Institute

• Create collection Students.

db.createCollection('students')

• Insert 10 documents with above mentioned structure.

db.students.insert([

{

"roll\_no": 1,

"stud\_name": "A",

"age": 10,

"branch": "Comp",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"playing",

"reading"

]

},

{

"roll\_no": 2,

"stud\_name": "B",

"age": 11,

"branch": "Comp",

"address": {

"city": "Mumbai",

"state": "MH"

},

"hobbies": [

"reading"

]

},

{

"roll\_no": 3,

"stud\_name": "C",

"age": 12,

"branch": "Civil",

"address": {

"city": "Nashik",

"state": "MH"

},

"hobbies": [

"reading",

"singing"

]

},

{

"roll\_no": 4,

"stud\_name": "D",

"age": 13,

"branch": "Mech",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"singing",

"dancing"

]

},

{

"roll\_no": 5,

"stud\_name": "E",

"age": 14,

"branch": "Comp",

"address": {

"city": "Mumbai",

"state": "MH"

},

"hobbies": [

"singing"

]

},

{

"roll\_no": 6,

"stud\_name": "F",

"age": 15,

"branch": "E&TC",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"dancing"

]

},

{

"roll\_no": 7,

"stud\_name": "G",

"age": 16,

"branch": "IT",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"playing",

"reading",

"singing"

]

},

{

"roll\_no": 8,

"stud\_name": "H",

"age": 17,

"branch": "Comp",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"playing",

"reading",

"drawing"

]

},

{

"roll\_no": 9,

"stud\_name": "G",

"age": 18,

"branch": "Civil",

"address": {

"city": "Pune",

"state": "MH"

},

"hobbies": [

"drumming"

]

},

{

"roll\_no": 10,

"stud\_name": "H",

"age": 19,

"branch": "Mech",

"address": {

"city": "Nashik",

"state": "MH"

},

"hobbies": [

"calling"

]

}

])

• Display all students’ information.

db.students.find().pretty()

• Display Student information whose age is greater than 15.

db.students.find({age: {$gt: 15}}).pretty()

• Display Student information sorted on name field

db.students.find().sort({stud\_name: 1}).pretty()

• Update student branch Computer of RollNo 3.

db.students.update({roll\_no: 3}, {$set: {branch: 'Comp'}})

• Remove document with RollNo 1

db.students.remove({roll\_no: 1})

• Display Student information whose name starts with A

db.students.find({stud\_name: \^A\}).pretty()

• Display the total numbers of documents available in collection.

db.students.aggregate(

[

{

$group: {

\_id: '$roll\_no',

total\_documents : {$sum: 1}

}

}

]).pretty()

• Display only first 5 documents.

db.students.find().limit(5).pretty()

• Display all documents instead of first 3.

db.students.find().skip(3).pretty()

• Display the name of Students who live in Pune City.

db.students.find({'address.city': 'Pune'}, {stud\_name: 1, \_id: 0}).pretty()

• Display the list of different cities from where students are coming.

db.students.distinct('address.city')

• Display the list of different cities with number of students from belonging to that city.

db.students.aggregate(

[

{

$group: {

\_id: '$address.city',

total\_students: {$sum: 1}

}

}

]).pretty()

• Display only Name of all students.

db.students.find({}, {\_id: 0, stud\_name: 1}).pretty()

• Display the hobbies of each student.

db.students.find({}, {\_id: 0, stud\_name: 1, hobbies: 1}).pretty()

• Drop Collection

db.students.drop()