**1.Create a Student Table to store name, course,m1,m2,m3,subjects:["HTML",CSS","MongoDB"],personal:{age,dob,father name,mobile number,email id,address}  of students**

test> use Student\_Table

switched to db Student\_Table

Student\_Table> db.createCollection("details")

{ ok: 1 }

Student\_Table>

**2. Insert at least 10 documents in a student table using insertMany().**

Student\_Table> db.details.insertMany([{"Name":"Bharani.R","Course":"B.E Mach","m1":60,"m2":70,"m3":98,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":23,"dob":new Date('apr 26,2000'),"father\_name":"Rangasamy","mobile\_number":8975678974,"Email\_id":"bharani123@gmail.com","address":"coimbatore"}},{"Name":"Ramkumar.R","Course":"BE IT","m1":72,"m2":66,"m3":85,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":22,"dob":new Date('jun 23,2001'),"father\_name":"Rangaraj","mobile\_number":9944897180,"Email\_id":"ramkumar123@gmail.com","address":"Annur"}},{"Name":"Sureshkumar","Course":"BE CSE","m1":89,"m2":68,"m3":98,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":24,"dob":new Date('feb 12,2002'),"father\_name":"kumaran","mobile\_number":8476857585,"Email\_id":"sureshkumar123@gmail.com","address":"coimbatore"}},{"Name":"kumar.R","Course":"BE EEE","m1":75,"m2":45,"m3":87,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":26,"dob":new Date('jan 25,2002'),"father\_name":"devaraj","mobile\_number":8967564356,"Email\_id":"kumar2124@gmail.com","address":"chennai"}},{"Name":"surya","Course":"BE CSE","m1":70,"m2":82,"m3":98,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":21,"dob":new Date('jun 22,2001'),"father\_name":"Prakeshraj","mobile\_number":5678435645,"Email\_id":"surya343@gmail.com","address":"Ooty"}},{"Name":"kalai","Course":"BE ECE","m1":78,"m2":67,"m3":89,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":22,"dob":new Date('feb 20,2003'),"father\_name":"Ranga","mobile\_number":3445556784,"Email\_id":"kalai123@gmail.com","address":"coimbatore"}},{"Name":"Bharathi.k","Course":"BE EEE","m1":78,"m2":65,"m3":86,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":20,"dob":new Date('mar 26,2001'),"father\_name":"surya","mobile\_number":6789578442,"Email\_id":"bharathi123@gmail.com","address":"Ooty"}},{"Name":"Rahul","Course":"BE IT","m1":87,"m2":83,"m3":81,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":23,"dob":new Date('dec 15,2002'),"father\_name":"ramasamy","mobile\_number":4678762563,"Email\_id":"rahul123@gmail.com","address":"coimbatore"}},{"Name":"Priya.R","Course":"BE IT","m1":60,"m2":89,"m3":100,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":23,"dob":new Date('nov 21,2001'),"father\_name":"Nagaraj","mobile\_number":5673643637,"Email\_id":"priya123@gmail.com","address":"salem"}},{"Name":"Sachin","Course":"BE EEE","m1":70,"m2":80,"m3":99,"Subjects":["HTML","CSS","MongoDB"],"personal":{"age":22,"dob":new Date('mar 15,2001'),"father\_name":"senthilkumar","mobile\_number":4758374738,"Email\_id":"Sachin123@gmail.com","address":"chennai"}}])

{

acknowledged: true,

insertedIds: {

'0': ObjectId("64401ec0696c646158a565b5"),

'1': ObjectId("64401ec0696c646158a565b6"),

'2': ObjectId("64401ec0696c646158a565b7"),

'3': ObjectId("64401ec0696c646158a565b8"),

'4': ObjectId("64401ec0696c646158a565b9"),

'5': ObjectId("64401ec0696c646158a565ba"),

'6': ObjectId("64401ec0696c646158a565bb"),

'7': ObjectId("64401ec0696c646158a565bc"),

'8': ObjectId("64401ec0696c646158a565bd"),

'9': ObjectId("64401ec0696c646158a565be")

}

}

**3. Find all documents in the collection of the student.**

Student\_Table> db.details.find().pretty()

[

{

\_id: ObjectId("64401ec0696c646158a565b5"),

Name: 'Bharani.R',

Course: 'B.E Mach',

m1: 60,

m2: 70,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 23,

dob: ISODate("2000-04-25T18:30:00.000Z"),

father\_name: 'Rangasamy',

mobile\_number: 8975678974,

Email\_id: 'bharani123@gmail.com',

address: 'coimbatore'

}

},

{

\_id: ObjectId("64401ec0696c646158a565b6"),

Name: 'Ramkumar.R',

Course: 'BE IT',

m1: 72,

m2: 66,

m3: 85,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 22,

dob: ISODate("2001-06-22T18:30:00.000Z"),

father\_name: 'Rangaraj',

mobile\_number: 9944897180,

Email\_id: 'ramkumar123@gmail.com',

address: 'Annur'

}

},

{

\_id: ObjectId("64401ec0696c646158a565b7"),

Name: 'Sureshkumar',

Course: 'BE CSE',

m1: 89,

m2: 68,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 24,

dob: ISODate("2002-02-11T18:30:00.000Z"),

father\_name: 'kumaran',

mobile\_number: 8476857585,

Email\_id: 'sureshkumar123@gmail.com',

address: 'coimbatore'

}

},

{

\_id: ObjectId("64401ec0696c646158a565b8"),

Name: 'kumar.R',

Course: 'BE EEE',

m1: 75,

m2: 45,

m3: 87,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 26,

dob: ISODate("2002-01-24T18:30:00.000Z"),

father\_name: 'devaraj',

mobile\_number: 8967564356,

Email\_id: 'kumar2124@gmail.com',

address: 'chennai'

}

},

{

\_id: ObjectId("64401ec0696c646158a565b9"),

Name: 'surya',

Course: 'BE CSE',

m1: 70,

m2: 82,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 21,

dob: ISODate("2001-06-21T18:30:00.000Z"),

father\_name: 'Prakeshraj',

mobile\_number: 5678435645,

Email\_id: 'surya343@gmail.com',

address: 'Ooty'

}

},

{

\_id: ObjectId("64401ec0696c646158a565ba"),

Name: 'kalai',

Course: 'BE ECE',

m1: 78,

m2: 67,

m3: 89,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 22,

dob: ISODate("2003-02-19T18:30:00.000Z"),

father\_name: 'Ranga',

mobile\_number: 3445556784,

Email\_id: 'kalai123@gmail.com',

address: 'coimbatore'

}

},

{

\_id: ObjectId("64401ec0696c646158a565bb"),

Name: 'Bharathi.k',

Course: 'BE EEE',

m1: 78,

m2: 65,

m3: 86,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 20,

dob: ISODate("2001-03-25T18:30:00.000Z"),

father\_name: 'surya',

mobile\_number: 6789578442,

Email\_id: 'bharathi123@gmail.com',

address: 'Ooty'

}

},

{

\_id: ObjectId("64401ec0696c646158a565bc"),

Name: 'Rahul',

Course: 'BE IT',

m1: 87,

m2: 83,

m3: 81,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 23,

dob: ISODate("2002-12-14T18:30:00.000Z"),

father\_name: 'ramasamy',

mobile\_number: 4678762563,

Email\_id: 'rahul123@gmail.com',

address: 'coimbatore'

}

},

{

\_id: ObjectId("64401ec0696c646158a565bd"),

Name: 'Priya.R',

Course: 'BE IT',

m1: 60,

m2: 89,

m3: 100,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 23,

dob: ISODate("2001-11-20T18:30:00.000Z"),

father\_name: 'Nagaraj',

mobile\_number: 5673643637,

Email\_id: 'priya123@gmail.com',

address: 'salem'

}

},

{

\_id: ObjectId("64401ec0696c646158a565be"),

Name: 'Sachin',

Course: 'BE EEE',

m1: 70,

m2: 80,

m3: 99,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 22,

dob: ISODate("2001-03-14T18:30:00.000Z"),

father\_name: 'senthilkumar',

mobile\_number: 4758374738,

Email\_id: 'Sachin123@gmail.com',

address: 'chennai'

}

}

]

**4. Find first documents in the collection of the student.**

Student\_Table> db.details.findOne()

{

\_id: ObjectId("64401ec0696c646158a565b5"),

Name: 'Bharani.R',

Course: 'B.E Mach',

m1: 60,

m2: 70,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 23,

dob: ISODate("2000-04-25T18:30:00.000Z"),

father\_name: 'Rangasamy',

mobile\_number: 8975678974,

Email\_id: 'bharani123@gmail.com',

address: 'coimbatore'

}

}

Student\_Table>

**5. Retrieve student's documents whose student course is B.E CSE.**

Student\_Table> db.details.find({"Course":"BE CSE"})

[

{

\_id: ObjectId("64401ec0696c646158a565b7"),

Name: 'Sureshkumar',

Course: 'BE CSE',

m1: 89,

m2: 68,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 24,

dob: ISODate("2002-02-11T18:30:00.000Z"),

father\_name: 'kumaran',

mobile\_number: 8476857585,

Email\_id: 'sureshkumar123@gmail.com',

address: 'coimbatore'

}

},

{

\_id: ObjectId("64401ec0696c646158a565b9"),

Name: 'surya',

Course: 'BE CSE',

m1: 70,

m2: 82,

m3: 98,

Subjects: [ 'HTML', 'CSS', 'MongoDB' ],

personal: {

age: 21,

dob: ISODate("2001-06-21T18:30:00.000Z"),

father\_name: 'Prakeshraj',

mobile\_number: 5678435645,

Email\_id: 'surya343@gmail.com',

address: 'Ooty'

}

}

]

**6. Retrieve only student name fields with the help of projection.**

Student\_Table> db.details.find({},{"Name":1,"\_id":0})

[

{ Name: 'Bharani.R' },

{ Name: 'Ramkumar.R' },

{ Name: 'Sureshkumar' },

{ Name: 'kumar.R' },

{ Name: 'surya' },

{ Name: 'kalai' },

{ Name: 'Bharathi.k' },

{ Name: 'Rahul' },

{ Name: 'Priya.R' },

{ Name: 'Sachin' }

]

**7. Retrieve student name, course, mobile number fields with the help of projection.**

Student\_Table> db.details.find({},{"Name":1,"Course":1,"personal.mobile\_number":1,"\_id":0})

[

{

Name: 'Bharani.R',

Course: 'B.E Mach',

personal: { mobile\_number: 8975678974 }

},

{

Name: 'Ramkumar.R',

Course: 'BE IT',

personal: { mobile\_number: 9944897180 }

},

{

Name: 'Sureshkumar',

Course: 'BE CSE',

personal: { mobile\_number: 8476857585 }

},

{

Name: 'kumar.R',

Course: 'BE EEE',

personal: { mobile\_number: 8967564356 }

},

{

Name: 'surya',

Course: 'BE CSE',

personal: { mobile\_number: 5678435645 }

},

{

Name: 'kalai',

Course: 'BE ECE',

personal: { mobile\_number: 3445556784 }

},

{

Name: 'Bharathi.k',

Course: 'BE EEE',

personal: { mobile\_number: 6789578442 }

},

{

Name: 'Rahul',

Course: 'BE IT',

personal: { mobile\_number: 4678762563 }

},

{

Name: 'Priya.R',

Course: 'BE IT',

personal: { mobile\_number: 5673643637 }

},

{

Name: 'Sachin',

Course: 'BE EEE',

personal: { mobile\_number: 4758374738 }

}

]

**8.Retrieve only student name whose m1 is greater than 70.**

Student\_Table> db.details.find({"m1":{"$gt":70}},{"Name":1,"\_id":0})

[

{ Name: 'Ramkumar.R' },

{ Name: 'Sureshkumar' },

{ Name: 'kumar.R' },

{ Name: 'kalai' },

{ Name: 'Bharathi.k' },

{ Name: 'Rahul' }

]

**9.Retrieve only student name whose m2 is less than 70.**

Student\_Table> db.details.find({"m2":{"$lt":70}},{"Name":1,"\_id":0})

[

{ Name: 'Ramkumar.R' },

{ Name: 'Sureshkumar' },

{ Name: 'kumar.R' },

{ Name: 'kalai' },

{ Name: 'Bharathi.k' }

]

**10.Retrieve only student name whose name equal to "Sachin".**

Student\_Table> db.details.find({"Name":{"$eq":"Sachin"}},{"Name":1,"\_id":0})

[ { Name: 'Sachin' } ]

**11.Retrieve only student name whose name not equal to "Sachin".**

Student\_Table> db.details.find({"Name":{"$ne":"Sachin"}},{"Name":1,"\_id":0})

[

{ Name: 'Bharani.R' },

{ Name: 'Ramkumar.R' },

{ Name: 'Sureshkumar' },

{ Name: 'kumar.R' },

{ Name: 'surya' },

{ Name: 'kalai' },

{ Name: 'Bharathi.k' },

{ Name: 'Rahul' },

{ Name: 'Priya.R' }

]

Today cover by:

1. findOne()
2. find()
3. find({“name”:”sachin”}) full document
4. find({“personal.age”:24})
5. find({},{“name”:1,”\_id”:0}) querys and projection and multiple field
6. **comparison operators**
7. find({},{})gl-greater than
8. find({},{})lt-less than
9. find({},{})eq-equal
10. find({},{})ne-not equal