1. **To retrieve student details whose marks are greater than 40 using logical operator.**

students> db.std.find({"$and":[{"m1":{"$gt":40}}]})

[

{

\_id: ObjectId("64412a7735793a21776d999b"),

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("64412a7735793a21776d999c"),

Name: 'Ramkumar.R',

Course: 'BE IT',

m1: 50,

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("64412a7735793a21776d999d"),

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("64412a7735793a21776d999e"),

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("64412a7735793a21776d99a0"),

Name: 'kalai',

Course: 'BE ECE',

m1: 50,

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("64412a7735793a21776d99a1"),

Name: 'Bharathi.k',

Course: 'BE EEE',

m1: 50,

m2: 65,

m3: 70,

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("64412a7735793a21776d99a2"),

Name: 'Rahul',

Course: 'BE IT',

m1: 87,

m2: 50,

m3: 40,

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'

}

}

]

students>

1. **To retrieve only student name and course who failed in all subjects.**

students> db.std.find({"$and":[{m1:{"$lt":70}},{m2:{"$lt":70}},{m3:{"$lt":70}}]},{"Name":1,"Course":1,"\_id":0})

[ { Name: 'surya', Course: 'BE CSE' } ]

students>

1. **To retrieve only student name and course who failed in only one subject.**

students> db.std.find({"$or":[{m1:{"$lt":55}},{m2:{"$lt":55}},{m3:{"$lt":55}}]},{"Name":1,"Course":1,"\_id":0})

[

{ Name: 'Ramkumar.R', Course: 'BE IT' },

{ Name: 'kumar.R', Course: 'BE EEE' },

{ Name: 'surya', Course: 'BE CSE' },

{ Name: 'kalai', Course: 'BE ECE' },

{ Name: 'Bharathi.k', Course: 'BE EEE' },

{ Name: 'Rahul', Course: 'BE IT' },

{ Name: 'Priya.R', Course: 'BE IT' },

{ Name: 'Sachin', Course: 'BE EEE' }

]

students>

1. **To retrieve student documents whose subjects only in HTML,MongoDB using in operator**

students> db.std.find({"Subjects":{"$in":["HTML","MongoDB"]}})

[

{

\_id: ObjectId("64412a7735793a21776d999b"),

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("64412a7735793a21776d999c"),

Name: 'Ramkumar.R',

Course: 'BE IT',

m1: 50,

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("64412a7735793a21776d999d"),

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("64412a7735793a21776d999e"),

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("64412a7735793a21776d999f"),

Name: 'surya',

Course: 'BE CSE',

m1: 35,

m2: 40,

m3: 22,

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("64412a7735793a21776d99a0"),

Name: 'kalai',

Course: 'BE ECE',

m1: 50,

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("64412a7735793a21776d99a1"),

Name: 'Bharathi.k',

Course: 'BE EEE',

m1: 50,

m2: 65,

m3: 70,

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("64412a7735793a21776d99a2"),

Name: 'Rahul',

Course: 'BE IT',

m1: 87,

m2: 50,

m3: 40,

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("64412a7735793a21776d99a3"),

Name: 'Priya.R',

Course: 'BE IT',

m1: 32,

m2: 60,

m3: 70,

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("64412a7735793a21776d99a4"),

Name: 'Sachin',

Course: 'BE EEE',

m1: 35,

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'

}

}

]

students>

1. **To retrieve students documents whose age not greater than 21.**

students> db.std.find({"personal.age":{"$not":{"$gt":21}}})

[

{

\_id: ObjectId("64412a7735793a21776d999f"),

Name: 'surya',

Course: 'BE CSE',

m1: 35,

m2: 40,

m3: 22,

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("64412a7735793a21776d99a1"),

Name: 'Bharathi.k',

Course: 'BE EEE',

m1: 50,

m2: 65,

m3: 70,

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'

}

}

]

students>

1. **To display only two documents  by using limt() method.**

students> db.std.find().limit(2)

[

{

\_id: ObjectId("64412a7735793a21776d999b"),

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("64412a7735793a21776d999c"),

Name: 'Ramkumar.R',

Course: 'BE IT',

m1: 50,

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'

}

}

]

students>

**7. To display only two documents  and skip 2 documents.**

students> db.std.find().limit(2).skip(2)

[

{

\_id: ObjectId("64412a7735793a21776d999d"),

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("64412a7735793a21776d999e"),

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'

}

}

]

students>

**8.To sort the name in ascending and descending order.**

students> db.std.find({},{"Name":1,"\_id":0},{"sort":{"Name":1}})

[

{ Name: 'Bharani.R' },

{ Name: 'Bharathi.k' },

{ Name: 'Priya.R' },

{ Name: 'Rahul' },

{ Name: 'Ramkumar.R' },

{ Name: 'Sachin' },

{ Name: 'Sureshkumar' },

{ Name: 'kalai' },

{ Name: 'kumar.R' },

{ Name: 'surya' }

]

students> db.std.find({},{"Name":1,"\_id":0},{"sort":{"Name":-1}})

[

{ Name: 'surya' },

{ Name: 'kumar.R' },

{ Name: 'kalai' },

{ Name: 'Sureshkumar' },

{ Name: 'Sachin' },

{ Name: 'Ramkumar.R' },

{ Name: 'Rahul' },

{ Name: 'Priya.R' },

{ Name: 'Bharathi.k' },

{ Name: 'Bharani.R' }

]

students>

**9.To sort the DOB in ascending and descending order.**

students> db.std.find({},{"personal.dob":1,"\_id":0}).sort({"personal.dob":1})

[

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

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

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

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

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

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

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

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

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

{ personal: { dob: ISODate("2003-02-19T18:30:00.000Z") } }

]

students> db.std.find({},{"personal.dob":1,"\_id":0}).sort({"personal.dob":-1})

[

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

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

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

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

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

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

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

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

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

{ personal: { dob: ISODate("2000-04-25T18:30:00.000Z") } }

]

students>

**10.To skip first 2 documents and display remaining 3 documents**.

students> db.std.find().limit(3).skip(2)

[

{

\_id: ObjectId("64412a7735793a21776d999d"),

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("64412a7735793a21776d999e"),

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("64412a7735793a21776d999f"),

Name: 'surya',

Course: 'BE CSE',

m1: 35,

m2: 40,

m3: 22,

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'

}

}

]

students>