Assignment No:2C

Q.Execute at least 10 queries on following MongoDB database

Create the collection Student (id, name, age, status, marks[])

Insert the documents in collection Student (use batch insert (use bulk insert , insertmany)

suitable to solve the given queries

> use Student

switched to db Student

> db.createCollection("student")

{ "ok" : 1 }

> db.student.insert({id:1,name:"Suyash",age:20,status:"B",marks:[99,56,78,69,79]

})

WriteResult({ "nInserted" : 1 })

> db.student.insert({id:2,name:"Rajat",age:20,status:"A",marks:[90,66,68,79,59]}

)

WriteResult({ "nInserted" : 1 })

> db.student.insert({id:3,name:"Sanket",age:21,status:"C",marks:[60,56,68,89,69]

})

WriteResult({ "nInserted" : 1 })

> db.student.insert({id:4,name:"Vishal",age:21,status:"B",marks:[67,76,68,89,79]

})

WriteResult({ "nInserted" : 1 })

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1. Write a MongoDB query to display all the documents in the collection users.

> db.student.find().pretty()

{

"\_id" : ObjectId("5b84eec4149d0ca081234c0c"),

"id" : 1,

"name" : "Suyash",

"age" : 20,

"status" : "B",

"marks" : [

99,

56,

78,

69,

79

]

}

{

"\_id" : ObjectId("5b84ef5c149d0ca081234c0d"),

"id" : 2,

"name" : "Rajat",

"age" : 20,

"status" : "A",

"marks" : [

90,

66,

68,

79,

59

]

}

{

"\_id" : ObjectId("5b84ef90149d0ca081234c0e"),

"id" : 3,

"name" : "Sanket",

"age" : 21,

"status" : "C",

"marks" : [

60,

56,

68,

89,

69

]

}

{

"\_id" : ObjectId("5b84efd1149d0ca081234c0f"),

"id" : 4,

"name" : "Vishal",

"age" : 21,

"status" : "B",

"marks" : [

67,

76,

68,

89,

79

]

}

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2. Display the list of documents in the descending order of id.

> db.student.find().sort({id:-1})

{ "\_id" : ObjectId("5b84efd1149d0ca081234c0f"), "id" : 4, "name" : "Vishal", "ag

e" : 21, "status" : "B", "marks" : [ 67, 76, 68, 89, 79 ] }

{ "\_id" : ObjectId("5b84ef90149d0ca081234c0e"), "id" : 3, "name" : "Sanket", "ag

e" : 21, "status" : "C", "marks" : [ 60, 56, 68, 89, 69 ] }

{ "\_id" : ObjectId("5b84ef5c149d0ca081234c0d"), "id" : 2, "name" : "Rajat", "age

" : 20, "status" : "A", "marks" : [ 90, 66, 68, 79, 59 ] }

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

>

>

-----------------------------------------------------------------

3. Display the documents whose status is A

> db.student.find({status:"A"})

{ "\_id" : ObjectId("5b84ef5c149d0ca081234c0d"), "id" : 2, "name" : "Rajat", "age

" : 20, "status" : "A", "marks" : [ 90, 66, 68, 79, 59 ] }

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4. Display the documents whose status is other than A

> db.student.find({status:{$ne:"A"}})

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

{ "\_id" : ObjectId("5b84ef90149d0ca081234c0e"), "id" : 3, "name" : "Sanket", "ag

e" : 21, "status" : "C", "marks" : [ 60, 56, 68, 89, 69 ] }

{ "\_id" : ObjectId("5b84efd1149d0ca081234c0f"), "id" : 4, "name" : "Vishal", "ag

e" : 21, "status" : "B", "marks" : [ 67, 76, 68, 89, 79 ] }

>

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5. Display the documents with status A and age greater than 15

> db.student.find({$and:[{status:"A"},{age:{$gt:15}}]})

{ "\_id" : ObjectId("5b84ef5c149d0ca081234c0d"), "id" : 2, "name" : "Rajat", "age

" : 20, "status" : "A", "marks" : [ 90, 66, 68, 79, 59 ] }

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6. Display the documents with age in the range of 20 to 50

> db.student.find({age:{$gte:20,$lte:50}})

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

{ "\_id" : ObjectId("5b84ef5c149d0ca081234c0d"), "id" : 2, "name" : "Rajat", "age

" : 20, "status" : "A", "marks" : [ 90, 66, 68, 79, 59 ] }

{ "\_id" : ObjectId("5b84ef90149d0ca081234c0e"), "id" : 3, "name" : "Sanket", "ag

e" : 21, "status" : "C", "marks" : [ 60, 56, 68, 89, 69 ] }

{ "\_id" : ObjectId("5b84efd1149d0ca081234c0f"), "id" : 4, "name" : "Vishal", "ag

e" : 21, "status" : "B", "marks" : [ 67, 76, 68, 89, 79 ] }

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7. Display the count of documents with age less than 55 .

> db.student.find({age:{$lte:55}}).count()

4

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8. Write a query to the document where the name field has a null value:

> db.student.find({name:null}).count()

0

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9. Display the document whose name starts with character s (use of $regx)

> db.student.find({name:{$regex:/^s/}})

> db.student.find({name:{$regex:/^S/}})

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

{ "\_id" : ObjectId("5b84ef90149d0ca081234c0e"), "id" : 3, "name" : "Sanket", "ag

e" : 21, "status" : "C", "marks" : [ 60, 56, 68, 89, 69 ] }

10. Query the document to display the list starting with s character and ending with h

apart from case sensitivity.

> db.student.find({name:{$regex:/^S.\*h$/}})

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

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11. Display the documents having marks greater than 40

> db.student.find({marks:{$gte:40}})

{ "\_id" : ObjectId("5b84eec4149d0ca081234c0c"), "id" : 1, "name" : "Suyash", "ag

e" : 20, "status" : "B", "marks" : [ 99, 56, 78, 69, 79 ] }

{ "\_id" : ObjectId("5b84ef5c149d0ca081234c0d"), "id" : 2, "name" : "Rajat", "age

" : 20, "status" : "A", "marks" : [ 90, 66, 68, 79, 59 ] }

{ "\_id" : ObjectId("5b84ef90149d0ca081234c0e"), "id" : 3, "name" : "Sanket", "ag

e" : 21, "status" : "C", "marks" : [ 60, 56, 68, 89, 69 ] }

{ "\_id" : ObjectId("5b84efd1149d0ca081234c0f"), "id" : 4, "name" : "Vishal", "ag

e" : 21, "status" : "B", "marks" : [ 67, 76, 68, 89, 79 ] }