TASK

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JAVA:

1. import java.util.ArrayList;

import java.util.List;

import org.bson.Document;

import com.mongodb.BasicDBObject;

import com.mongodb.client.FindIterable;

import com.mongodb.client.MongoClient;

import com.mongodb.client.MongoClients;

import com.mongodb.client.MongoCollection;

import com.mongodb.client.MongoDatabase;

public class task {

public static void main(String[] args) {

// Creating a Mongo client

MongoClient mongoClient = MongoClients.create("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("Saturday");

database.createCollection("Students");

// Get the collection

MongoCollection<Document> collection = database.getCollection("Students");

List<Document> documents = new ArrayList<>();

documents.add(new Document("First\_Name", "Rohit")

.append("Last\_Name", "Sharma")

.append("mark", "45")

.append("age", "37")

.append("phone", "9000012345"));

documents.add(new Document("First\_Name", "Sachin")

.append("Last\_Name", "Tendulkar")

.append("mark", "100")

.append("age", "50")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Virat")

.append("Last\_Name", "kohli")

.append("mark", "80")

.append("age", "35")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Ricky")

.append("Last\_Name", "Ponting")

.append("mark", "75")

.append("age", "49")

.append("phone", "9000054321"));

collection.insertMany(documents);

FindIterable<Document> allDocuments = collection.find().sort(new BasicDBObject("mark",-1));

int maxi=0;

for (Document doc:allDocuments){

String mark = doc.getString("mark");

int mark1 = Integer.parseInt(doc.getString("mark"));

if (mark1>maxi){

maxi=mark1;

}

}

for (Document doc:allDocuments){

int mark2 = Integer.parseInt(doc.getString("mark"));

if (mark2==maxi){

System.out.println(doc);

}

}

}

}

2.

import java.util.ArrayList;

import java.util.List;

import org.bson.Document;

import com.mongodb.BasicDBObject;

import com.mongodb.client.FindIterable;

import com.mongodb.client.MongoClient;

import com.mongodb.client.MongoClients;

import com.mongodb.client.MongoCollection;

import com.mongodb.client.MongoDatabase;

public class task2 {

public static void main(String[] args) {

// Creating a Mongo client

MongoClient mongoClient = MongoClients.create("mongodb://localhost:27017");

MongoDatabase database = mongoClient.getDatabase("Saturday");

database.createCollection("Employees");

// Get the collection

MongoCollection<Document> collection = database.getCollection("Employees");

List<Document> documents = new ArrayList<>();

documents.add(new Document("First\_Name", "Rohit")

.append("Last\_Name", "Sharma")

.append("salary", "45000")

.append("age", "27")

.append("phone", "9000012345"));

documents.add(new Document("First\_Name", "Sachin")

.append("Last\_Name", "Tendulkar")

.append("salary", "10000")

.append("age", "30")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Virat")

.append("Last\_Name", "kohli")

.append("salary", "80000")

.append("age", "35")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Ricky")

.append("Last\_Name", "Ponting")

.append("salary", "75000")

.append("age", "49")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Mahendra")

.append("Last\_Name", "Singh")

.append("salary", "70000")

.append("age", "33")

.append("phone", "9000054321"));

documents.add(new Document("First\_Name", "Ashish")

.append("Last\_Name", "Nehra")

.append("salary", "60000")

.append("age", "38")

.append("phone", "9000054321"));

collection.insertMany(documents);

FindIterable<Document> allDocuments = collection.find().sort(new BasicDBObject("salary",-1));

long maxi=1000000000000000000L;

for (Document doc:allDocuments){

int sal1 = Integer.parseInt(doc.getString("salary"));

int age=Integer.parseInt(doc.getString("age"));

if (sal1<maxi && (age>=30 || age<=40)){

maxi=sal1;

}

}

for (Document doc:allDocuments){

int mark2 = Integer.parseInt(doc.getString("salary"));

int age1=Integer.parseInt(doc.getString("age"));

if (mark2==maxi && (age1>=30 || age1<=40)){

System.out.println(doc);

}

}

}

}

MongoDB:

1.

db.products1.find(

{$or:[{

$and:

[{price:{$lte:900},price:{$gte:400}}],"spec.ram":4

}]},{name:1})

2.

db.products1.find(

{$nor:[{

$or:

[{price:{$lte:900},price:{$gte:400}}],"spec.ram":4

}]},{name:1})

3.

db.products1.find({

$or:[{price:699},{storage:1024}]},{name:1,price:1,storage:1})

4.

db.products1.find(

{

price: { $not: { $in: [599, 899] } },

"spec.ram": { $gt: 8 }

}

)

5.

db.products1.find(

{

"spec.screen": { $ne: 9.7 },

color: { $not: { $in: ["gold"] } }

}

)

6.

db.products1.find(

{

releaseDate: { $lt: ISODate("2020-01-01") },

price: { $ne: 799 }

}

)

7.

db.products1.find(

{

storage: { $not: { $in: [256] } },

color: { $in: ["white"] }

}

)

8.

db.products1.find(

{

"spec.ram": { $ne: 4 },

"spec.screen": { $lt: 9 }

}

)

9.

db.products1.find(

{

$nor: [

{ color: "blue" },

{ "spec.screen": { $lt: 7 } }

]

}

)

10

db.products1.find(

{

$or: [

{ color: "white" },

{ storage: { $gte: 128 } }

]

}

)

11.

db.products1.find(

{

"spec.screen": { $lte: 9.5 },

"spec.ram": { $nin: [4, 8, 12] },

releaseDate: { $gt: ISODate("2015-01-01") }

}

)

12.

db.products1.find(

{

$or: [

{ color: "white" },

{ storage: { $gte: 128 } }

],

price: { $ne: 899 }

}

)