

BDA LAB 2

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1BM22CS420

DATE: 1/4/2024

I. Perform the following DB operations using MongoDB.

1. Create a database "Student" with the following attributes Rollno, Age, ContactNo, Email-Id.
2. Insert appropriate values
3. Write query to update Email-Id of a student with rollno 10.
4. . Replace the student name from "ABC" to "FEM" of rollno 11

II. Perform the following DB operations using MongoDB.

1. Create a collection by name Customers with the following attributes.
Cust_id, Acc_Bal, Acc_Type
2. Insert at least 5 values into the table
3. Write a query to display those records whose total account balance is greater than 1200 of account type 'Z' for each customer_id.
4. Determine Minimum and Maximum account balance for each customer_i

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Microsoft Windows [Version 10.0.22631.3296]
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C:\Users\student>mongosh
Current Mongosh Log ID: 660a7bad0cbcf7aafd14a0d
Connecting to: mongod://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.2.1
MongoNetworkError: connect ECONNREFUSED 127.0.0.1:27017

C:\Users\student>mongosh "mongodb+srv://cluster0.bjwnzsv.mongodb.net/" --apiVersion 1 --username prithvipscs21 --password yS8gBxwY9hHTmUTT
Current Mongosh Log ID: 660a7bb10c72f70c2cd14a0d
Connecting to: mongodb+srv://<credentials>@cluster0.bjwnzsv.mongodb.net/?appName=mongosh+2.2.1
Using MongoDB: 7.0.7 (API Version 1)
Using Mongosh: 2.2.1

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

Atlas atlas-14nrww-shard-0 [primary] test> use Student
switched to db Student
Atlas atlas-14nrww-shard-0 [primary] Student> db.Student.insertMany([
...   {Rollno: 10, Age: 20, ContactNo: "1234567890", EmailId: "example1@example.com"},
...   {Rollno: 11, Age: 21, ContactNo: "9876543210", EmailId: "example2@example.com"},
...   // Add more documents as needed
... ])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('660a7d1b0c72f70c2cd14a0e'),
    '1': ObjectId('660a7d1b0c72f70c2cd14a0f')
  }
}
Atlas atlas-14nrww-shard-0 [primary] Student> db.students.updateOne(
...   { "Rollno": 11 },
...   { $set: { "Name": "FEM" } }
... )
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
Atlas atlas-14nrww-shard-0 [primary] Student> db.Student.update({Rollno: 10}, {$set: {EmailId: "newemail@example.com"}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}

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    insertedId: null,
    matchedCount: 0,
    modifiedCount: 0,
    upsertedCount: 0
  }
Atlas atlas-14nrww-shard-0 [primary] Student> db.Student.update({Rollno: 10}, {$set: {EmailId: "newemail@example.com"}})
DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Atlas atlas-14nrww-shard-0 [primary] Student>
(To exit, press Ctrl+C again or Ctrl+D or type .exit)
Atlas atlas-14nrww-shard-0 [primary] Student> db.dropDatabase
ReferenceError: db is not defined
Atlas atlas-14nrww-shard-0 [primary] Student> db.dropDatabase
[Function: dropDatabase] AsyncFunction {
  apiVersions: [ 1, Infinity ],
  returnsPromise: true,
  serverVersions: [ '0.0.0', '999.999.999' ],
  topologies: [ 'RepSet', 'Sharded', 'LoadBalanced', 'Standalone' ],
  returnType: { type: 'unknown', attributes: {} },
  deprecated: false,
  platforms: [ 'Compass', 'Browser', 'CLI' ],
  isDirectShellCommand: false,
  acceptsRawInput: false,
  shellCommandCompleter: undefined,
  help: [Function (anonymous)] Help
}
Atlas atlas-14nrww-shard-0 [primary] Student>

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Connecting to:      mongodbsrv://<credentials>@cluster0.mongodb.net/appdevmongodbshard2.2.1
Using MongoDB:     7.0.7 (API Version 1)
Using Mongosh:     2.2.1
Mongosh 2.2.2 is available for download: https://www.mongodb.com/try/download/shell
For mongosh info see: https://docs.mongodb.com/mongodb-shell/

Atlas atlas-vohkna-shard-0 [primary] test> db.createCollection("Customers")
{ ok: 1 }
Atlas atlas-vohkna-shard-0 [primary] test> db.Customers.insertMany([
...   {Cust_id: 1, Acc_Bal: 1000, Acc_Type: 'Z'},
...   {Cust_id: 2, Acc_Bal: 1500, Acc_Type: 'Z'},
...   {Cust_id: 3, Acc_Bal: 2000, Acc_Type: 'Z'},
...   {Cust_id: 4, Acc_Bal: 800, Acc_Type: 'Y'},
...   {Cust_id: 5, Acc_Bal: 1800, Acc_Type: 'Z'},
... ])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('668a845b0b9ab1892fd14a0e'),
    '1': ObjectId('668a845b0b9ab1892fd14a0f'),
    '2': ObjectId('668a845b0b9ab1892fd14a10'),
    '3': ObjectId('668a845b0b9ab1892fd14a11'),
    '4': ObjectId('668a845b0b9ab1892fd14a12')
  }
}
Atlas atlas-vohkna-shard-0 [primary] test> db.Customers.find({ "Acc_Type": "Z", "Acc_Bal": { $gt: 1200 } })
[
  {
    _id: ObjectId('668a845b0b9ab1892fd14a0f'),
    Cust_id: 2,
    Acc_Bal: 1500,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId('668a845b0b9ab1892fd14a10'),
    Cust_id: 3,
    Acc_Bal: 2000,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId('668a845b0b9ab1892fd14a12'),
    Cust_id: 5,
    Acc_Bal: 1800,
    Acc_Type: 'Z'
  }
]

```

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}
Atlas atlas-vohkna-shard-0 [primary] test> db.Customers.find({ "Acc_Type": "Z", "Acc_Bal": { $gt: 1200 } })
{
  {
    _id: ObjectId('660a045b0b9ab1892fd10a0f'),
    Cust_id: 2,
    Acc_Bal: 1500,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId('660a045b0b9ab1892fd10a10'),
    Cust_id: 3,
    Acc_Bal: 2000,
    Acc_Type: 'Z'
  },
  {
    _id: ObjectId('660a045b0b9ab1892fd10a12'),
    Cust_id: 5,
    Acc_Bal: 1000,
    Acc_Type: 'Z'
  }
}
Atlas atlas-vohkna-shard-0 [primary] test> db.Customers.aggregate([
... { $group: { _id: "$Cust_id", minBalance: { $min: "$Acc_Bal" }, maxBalance: { $max: "$Acc_Bal" } } }
... ])
{
  { _id: 3, minBalance: 2000, maxBalance: 2000 },
  { _id: 1, minBalance: 1000, maxBalance: 1000 },
  { _id: 2, minBalance: 1500, maxBalance: 1500 },
  { _id: 4, minBalance: 800, maxBalance: 800 },
  { _id: 5, minBalance: 1000, maxBalance: 1000 }
}
Atlas atlas-vohkna-shard-0 [primary] test> |

```



Snipping Tool

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