**Name : Anuj Mhaisdhune**

**MongoDB – Aggregation**

Microsoft Windows [Version 10.0.19045.6332]

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C:\Program Files\MongoDB\Server\8.0\bin>mongosh

Current Mongosh Log ID: 68e4b7b986fce9d652cebea3

Connecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+2.5.8

Using MongoDB: 8.0.14

Using Mongosh: 2.5.8

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

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically (https://www.mongodb.com/legal/privacy-policy).

You can opt-out by running the disableTelemetry() command.

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The server generated these startup warnings when booting

2025-10-03T14:08:41.566+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

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test> Show dbs;

Uncaught:

SyntaxError: Missing semicolon. (1:4)

> 1 | Show dbs;

| ^

2 |

test> show dbs;

admin 40.00 KiB

company 72.00 KiB

config 72.00 KiB

demo 40.00 KiB

demoexample 24.00 KiB

local 72.00 KiB

test 80.00 KiB

test> use bank;

switched to db bank

bank> db.createCollection('customer');

{ ok: 1 }

bank> db.customer.insertone({\_id:101,name:'anuj',bal:30000,bank:'Kotak',location:'Talegaon';});

Uncaught:

SyntaxError: Unexpected token, expected "," (1:85)

> 1 | db.customer.insertone({\_id:101,name:'anuj',bal:30000,bank:'Kotak',location:'Talegaon';});

| ^

2 |

bank> db.customer.insertone({\_id:101,name:'anuj',bal:30000,bank:'Kotak',location:'Talegaon'});

TypeError: db.customer.insertone is not a function

bank> db.customer.insertOne({\_id:101,name:'anuj',bal:30000,bank:'Kotak',location:'Talegaon'});

{ acknowledged: true, insertedId: 101 }

bank> db.customer.insertOne({\_id:102,name:'pranat',bal:40000,bank:'Kotak',location:'Pune'});

{ acknowledged: true, insertedId: 102 }

bank> db.customer.insertOne({\_id:103,name:'Harsh',bal:10000,bank:'Axis',location:'Pune'});

{ acknowledged: true, insertedId: 103 }

bank> db.customer.insertOne({\_id:104,name:'Mayur',bal:20000,bank:'Axis',location:'Pune'});

{ acknowledged: true, insertedId: 104 }

bank> db.customer.count();

DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.

4

bank> db.customer.aggregate([{$group:{id:null,total\_bal:{$sum:'$bal'}}}]);

MongoServerError[Location40234]: The field 'id' must be an accumulator object

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$sum:'$bal'}}}]);

[ { \_id: null, total\_bal: 100000 } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$min:'$bal'}}}]);

[ { \_id: null, total\_bal: 10000 } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$max:'$bal'}}}]);

[ { \_id: null, total\_bal: 40000 } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$avg:'$bal'}}}]);

[ { \_id: null, total\_bal: 25000 } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$push:'$bal'}}}]);

[ { \_id: null, total\_bal: [ 30000, 40000, 10000, 20000 ] } ]

bank> db.customer.insertOne({\_id:105,name:'Bhumi',bal:20000,bank:'Axis',location:'Pune'});

{ acknowledged: true, insertedId: 105 }

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$push:'$bal'}}}]);

[ { \_id: null, total\_bal: [ 30000, 40000, 10000, 20000, 20000 ] } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$adddToSet:'$bal'}}}]);

MongoServerError[Location15952]: unknown group operator '$adddToSet'

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$addToSet:'$bal'}}}]);

[ { \_id: null, total\_bal: [ 30000, 20000, 40000, 10000 ] } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$sum:'$bal'}}}]);

[ { \_id: null, total\_bal: 120000 } ]

bank> db.customer.find().sort({ cust\_id: -1 }).limit(1);

[

{

\_id: 101,

name: 'anuj',

bal: 30000,

bank: 'Kotak',

location: 'Talegaon'

}

]

bank> db.customer.find().sort({ cust\_id: 1 }).limit(1);

[

{

\_id: 101,

name: 'anuj',

bal: 30000,

bank: 'Kotak',

location: 'Talegaon'

}

]

bank> db.customer.find().sort({ cust\_id: -1 }).limit(1);

[

{

\_id: 101,

name: 'anuj',

bal: 30000,

bank: 'Kotak',

location: 'Talegaon'

}

]

bank> db.customer.find().sort({ cust\_id: 103 }).limit(1);

MongoInvalidArgumentError: Invalid sort direction: 103

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$first:'$bal'}}}]);

[ { \_id: null, total\_bal: 30000 } ]

bank> db.customer.aggregate([{$group:{\_id:null,total\_bal:{$last:'$bal'}}}]);

[ { \_id: null, total\_bal: 20000 } ]

bank> db.customer.aggregate([{$group:{$bank:null,total\_bal:{$sum:'$bal'}}}]);

MongoServerError[Location40234]: The field '$bank' must be an accumulator object

bank> db.customer.aggregate([{$group:{$bank,total\_bal:{$sum:'$bal'}}}]);

ReferenceError: $bank is not defined

bank> db.customer.aggregate([{$group:{\_id:$bank,total\_bal:{$adddToSet:'$bal'}}}]);

ReferenceError: $bank is not defined

bank> db.customer.aggregate([{$group:{\_id:$kotak,total\_bal:{$adddToSet:'$bal'}}}]);

ReferenceError: $kotak is not defined

bank> db.customer.aggregate([{$group:{\_id:$Kotak,total\_bal:{$adddToSet:'$bal'}}}]);

ReferenceError: $Kotak is not defined

bank> db.customer.find();

[

{

\_id: 101,

name: 'anuj',

bal: 30000,

bank: 'Kotak',

location: 'Talegaon'

},

{

\_id: 102,

name: 'pranat',

bal: 40000,

bank: 'Kotak',

location: 'Pune'

},

{

\_id: 103,

name: 'Harsh',

bal: 10000,

bank: 'Axis',

location: 'Pune'

},

{

\_id: 104,

name: 'Mayur',

bal: 20000,

bank: 'Axis',

location: 'Pune'

},

{

\_id: 105,

name: 'Bhumi',

bal: 20000,

bank: 'Axis',

location: 'Pune'

}

]

bank> db.customer.aggregate([{$group:{\_id:$kotak,total\_bal:{$sum:'$bal'}}}]);

ReferenceError: $kotak is not defined

bank> db.customer.aggregate([{$group:{\_id:'$bank',total\_bal:{$sum:'$bal'}}}]);

[

{ \_id: 'Axis', total\_bal: 50000 },

{ \_id: 'Kotak', total\_bal: 70000 }

]

bank> db.customer.aggregate([{$group:{\_id:'$bank',total\_bal:{$max:'$bal'}}}]);

[

{ \_id: 'Kotak', total\_bal: 40000 },

{ \_id: 'Axis', total\_bal: 20000 }

]

bank> db.customer.aggregate([{$group:{\_id:'$bank',total\_bal:{$avg:'$bal'}}}]);

[

{ \_id: 'Kotak', total\_bal: 35000 },

{ \_id: 'Axis', total\_bal: 16666.666666666668 }

]

bank> db.createIndex({cust id : 1)};

Uncaught:

SyntaxError: Unexpected token, expected "," (1:21)

> 1 | db.createIndex({cust id : 1)};

| ^

2 |

bank> db.customer.createIndex({customer id : 1)};

Uncaught:

SyntaxError: Unexpected token, expected "," (1:34)

> 1 | db.customer.createIndex({customer id : 1)};

| ^

2 |

bank> db.customer.createIndex({customer\_id : 1)};

Uncaught:

SyntaxError: Unexpected token, expected "," (1:40)

> 1 | db.customer.createIndex({customer\_id : 1)};

| ^

2 |

bank> db.customer.createIndex({customer\_id : 1});

customer\_id\_1

bank> db.customer.getIndexes();

[

{ v: 2, key: { \_id: 1 }, name: '\_id\_' },

{ v: 2, key: { customer\_id: 1 }, name: 'customer\_id\_1' }

]

bank>