**Practical No. 10**

* **Aggregation Function**

Microsoft Windows [Version 10.0.19045.6332]

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C:\Program Files\MongoDB\Server\8.2\bin>mongosh

Current Mongosh Log ID: 68e4b82d643ae0ab5fcebea3

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

Using MongoDB: 8.2.0

Using Mongosh: 2.5.8

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

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The server generated these startup warnings when booting

2025-10-03T15:21:59.801+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;

admin 296.00 KiB

company 136.00 KiB

config 96.00 KiB

cricket 160.00 KiB

local 80.00 KiB

test> use bank;

switched to db bank

bank> db.createCollection('customer');

{ ok: 1 }

bank> db.customer.insertOne({\_id:101,name:'Aditi',bal:10000,bank:'SBI',location:'Chinchwad'});

{ acknowledged: true, insertedId: 101 }

bank> db.customer.insertOne({\_id:102,name:'Sanket',bal:20000,bank:'Axis',location:'Ravet'});

{ acknowledged: true, insertedId: 102 }

bank> db.customer.insertOne({\_id:103,name:'Sangam',bal:30000,bank:'BOB',location:'Nanded'});

{ acknowledged: true, insertedId: 103 }

bank> db.customer.insertOne({\_id:104,name:'Sangam',bal:40000,bank:'KOTAK',location:'Nashik'});

{ acknowledged: true, insertedId: 104 }

bank>

db.customer.insertOne({\_id:105,name:'Sangam',bal:30000,bank:'BOB',location:'Nanded'});

{ acknowledged: true, insertedId: 105 }

bank> db.customer.count();

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

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

[ { \_id: null, total\_bal: 130000 } ]

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: 26000 } ]

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

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

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

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

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

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

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

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

bank>