**Practical No. 11**

**MapReduce functions:**

Microsoft Windows [Version 10.0.26100.6899]

(c) Microsoft Corporation. All rights reserved.

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

Current Mongosh Log ID: 68fdb4f1aee019bb53cebea3

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

Using MongoDB: 8.2.1

Using Mongosh: 2.5.8

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

------

The server generated these startup warnings when booting

2025-10-16T02:35:41.046+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

test> use bank;

bank> db.bank.insertMany([{cid:101,c\_name:'Sanket',b\_name:'SBI',branch:'Nashik',bal:100000}]);

{

acknowledged: true,

insertedIds: { '0': ObjectId('68fdb643aee019bb53cebea4') }

}

bank> db.bank.insertMany([{cid:102,c\_name:'Vinu',b\_name:'IPPB',branch:'kundalwadi',bal:110000}]);

{

acknowledged: true,

insertedIds: { '0': ObjectId('68fdb84daee019bb53cebea5') }

}

bank> db.bank.insertMany([{cid:103,c\_name:'Sakshi',b\_name:'Axis',branch:'Ravet',bal:120000}]);

{

acknowledged: true,

insertedIds: { '0': ObjectId('68fdb8d7aee019bb53cebea6') }

}

bank> db.bank.insertMany([{cid:104,c\_name:'Jethalal',b\_name:'Dena',branch:'Akurdi',bal:130000}]);

{

acknowledged: true,

insertedIds: { '0': ObjectId('68fdb947aee019bb53cebea7') }

}

bank> db.bank.insertMany([{cid:105,c\_name:'Metha',b\_name:'HDFC',branch:'pimpri',bal:140000}]);

{

acknowledged: true,

insertedIds: { '0': ObjectId('68fdb98faee019bb53cebea8') }

}

bank> db.bank.find();

[

{

\_id: ObjectId('68fdb643aee019bb53cebea4'),

cid: 101,

c\_name: 'Sanket',

b\_name: 'SBI',

branch: 'Nashik',

bal: 100000

},

{

\_id: ObjectId('68fdb84daee019bb53cebea5'),

cid: 102,

c\_name: 'Vinu',

b\_name: 'IPPB',

branch: 'kundalwadi',

bal: 110000

},

{

\_id: ObjectId('68fdb8d7aee019bb53cebea6'),

cid: 103,

c\_name: 'Sakshi',

b\_name: 'Axis',

branch: 'Ravet',

bal: 120000

},

{

\_id: ObjectId('68fdb947aee019bb53cebea7'),

cid: 104,

c\_name: 'Jethalal',

b\_name: 'Dena',

branch: 'Akurdi',

bal: 130000

},

{

\_id: ObjectId('68fdb98faee019bb53cebea8'),

cid: 105,

c\_name: 'Metha',

b\_name: 'HDFC',

branch: 'pimpri',

bal: 140000

}

]

bank> var map=function(){emit(this.cid,this.bal)};

bank> var reduce=function(cid,bal){return Array.sum(bal)}

bank> db.bank.mapReduce(map,reduce,{out:'transactions'})

DeprecationWarning: Collection.mapReduce() is deprecated. Use an aggregation instead.

See https://mongodb.com/docs/manual/core/map-reduce for details.

{ result: 'transactions', ok: 1 }

bank> db.transactions.find();

[

{ \_id: 104, value: 130000 },

{ \_id: 103, value: 120000 },

{ \_id: 101, value: 100000 },

{ \_id: 102, value: 110000 },

{ \_id: 105, value: 140000 }

]