Name: Devesh Mali

Roll no: 13228

MongoDB - Map reduces operations: Implement Map reduces operation with suitable example using MongoDB.

Output:

Please enter a MongoDB connection string (Default: mongodb://localhost/): mongo mongo

Current Mongosh Log ID: 66fffc32e2c7f0cc38c73bf7

Connecting to:

mongodb://127.0.0.1:27017/mongo?directConnection=true&serverSelectionTimeoutMS=200 0&appName=mongosh+2.3.1

Using MongoDB: 8.0.0

Using Mongosh: 2.3.1

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

------

The server generated these startup warnings when booting

2024-10-04T05:52:52.759+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

------

mongo> show dbs

admin 40.00 KiB config 108.00 KiB customer 60.00 KiB local 72.00 KiB stu\_details 72.00 KiB mongo> use payment\_status switched to db payment\_status

payment\_status> db.stat.insertMany([{C\_id: "VH2415", Product: "Dark Chocolate", Amount:150, Status: "Paid"}, {C\_id: "VH2415", Product: "Choco Bakes", Amount:145,

Status: "Not Paid"}, {C\_id: "VK1524", Product: "Ramen", Amount:225, Status: "Paid"},

{C\_id: "VH2415", Product: "Wine", Amount:11500, Status: "Paid"}, {C\_id: "VK1524",

Proudct: "Biscuits", Amount:475, Status: "Not Paid"}]);

{ acknowledged: true, insertedIds: {

'0': ObjectId('66fffe42e2c7f0cc38c73bf8'),

'1': ObjectId('66fffe42e2c7f0cc38c73bf9'), '2': ObjectId('66fffe42e2c7f0cc38c73bfa'),

'3': ObjectId('66fffe42e2c7f0cc38c73bfb'),

'4': ObjectId('66fffe42e2c7f0cc38c73bfc')

} } payment\_status> db.stat.find().pretty()

[

{

\_id: ObjectId('66fffe42e2c7f0cc38c73bf8'),

C\_id: 'VH2415',

Product: 'Dark Chocolate',

Amount: 150,

Status: 'Paid'

},

{

\_id: ObjectId('66fffe42e2c7f0cc38c73bf9'),

C\_id: 'VH2415',

Product: 'Choco Bakes',

Amount: 145,

Status: 'Not Paid'

},

{

\_id: ObjectId('66fffe42e2c7f0cc38c73bfa'),

C\_id: 'VK1524',

Product: 'Ramen',

Amount: 225,

Status: 'Paid'

},

{

\_id: ObjectId('66fffe42e2c7f0cc38c73bfb'),

C\_id: 'VH2415',

Product: 'Wine',

Amount: 11500,

Status: 'Paid'

},

{

\_id: ObjectId('66fffe42e2c7f0cc38c73bfc'),

C\_id: 'VK1524',

Proudct: 'Biscuits',

Amount: 475,

Status: 'Not Paid'

}

]

payment\_status>

db.stat.mapReduce(function(){emit(this.C\_id,this.Amount);},function(key,values){return Array.sum(values)},{query:{"Status":"Not Paid"},out:"Bill\_Amount:"})

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

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

{ result: 'Bill\_Amount:', ok: 1 } payment\_status> var mapfun1=function(){emit(this.C\_id,this.Amount);};

payment\_status> var reducefun1=function(keyC\_id,valueAmount){return Array.sum(valueAmount);}; payment\_status> db.stat.mapReduce(mapFun1,reduceFun1,{out:"Map"})

ReferenceError: mapFun1 is not defined

payment\_status> db.stat.mapReduce(mapfun1,reducefun1,{out:"Map"})

{ result: 'Map', ok: 1 } payment\_status> db.Bill\_Amount:.find().pretty()

Uncaught:

SyntaxError: Missing semicolon. (1:14) payment\_status> db.Bill\_Amount.find().pretty() payment\_status> db.Map.find()

[ { \_id: 'VH2415', value: 11795 }, { \_id: 'VK1524', value: 700 } ]

payment\_status>

db.stat.mapReduce(function(){emit(this.C\_id,this.Amount);},function(key,values){return Array.sum(values)},{query:{"Status":"Not Paid"},out:"Bill\_Amount"})

{ result: 'Bill\_Amount', ok: 1 } payment\_status> db.Bill\_Amount.find().pretty()

[ { \_id: 'VH2415', value: 145 }, { \_id: 'VK1524', value: 475 } ] payment\_status>