Group B : Lab Assignment no. 12

Title :Implement Map reduces operation with suitable example using MongoDB

dipti@dipti-VPCEG28FN:~$ mongo MongoDB shell version v3.6.3

connecting to: mongodb://127.0.0.1:27017 MongoDB server version: 3.6.3

Server has startup warnings:

2020-10-15T14:26:28.786+0530 I STORAGE [initandlisten]

2020-10-15T14:26:28.786+0530 I STORAGE [initandlisten] \*\* WARNING:

Using the XFS filesystem is strongly recommended with the WiredTiger storage engine

2020-10-15T14:26:28.786+0530 I STORAGE [initandlisten] \*\* See <http://dochub.mongodb.org/core/prodnotes-filesystem>

2020-10-15T14:26:36.417+0530 I CONTROL [initandlisten]

2020-10-15T14:26:36.417+0530 I CONTROL [initandlisten] \*\* WARNING:

Access control is not enabled for the database.

2020-10-15T14:26:36.417+0530 I CONTROL [initandlisten] \*\* Read and write access to data and configuration is unrestricted.

2020-10-15T14:26:36.417+0530 I CONTROL [initandlisten]

>

* **use Abhi switched to db Abhi**
* **db.createCollection('Journal');**

{ "ok" : 1 }

>db.Journal.insert({'book\_id':1,'book\_name':'JavacdOOP','amt':500,'status':'A vailable'});

WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':1,'book\_name':'JavaOOP','amt':400,'status':'Not Available'});**

WriteResult({ "nInserted" : 1 })

>db.Journal.insert({'book\_id':1,'book\_name':'Java','amt':300,'s tatus':'Not Available'});

WriteResult({ "nInserted" : 1 })

>db.Journal.insert({'book\_id':2,'book\_name':'Java','amt':300,'s tatus':'Available'});

WriteResult({ "nInserted" : 1 })>

>db.Journal.insert({'book\_id':2,'book\_name':'OPP','amt':200,'st atus':'Available'});

WriteResult({ "nInserted" : 1 })

>db.Journal.insert({'book\_id':2,'book\_name':'C+','amt':200,'status':'Available'}

);

WriteResult({ "nInserted" : 1 })

>db.Journal.insert({'book\_id':3,'book\_name':'C+','amt':150,'status':'Available'}

);

WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':3,'book\_name':'C+**

+','amt':200,'status':'Not Available'}); WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':4,'book\_name':'OPP C+**

+','amt':300,'status':'Not Available'}); WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':5,'book\_name':'OPP C+**

+','amt':400,'status':'Available'}); WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':5,'book\_name':'C+**

+','amt':400,'status':'Available'}); WriteResult({ "nInserted" : 1 })

* **db.Journal.insert({'book\_id':5,'book\_name':'C++ Java','amt':400,'status':'Not Available'}); WriteResult({ "nInserted" : 1 })**
* **var mapfunction=function(){ emit(this.book\_id,this.amt)};**
* **var reducefunction=function(key,value){return Array.sum(value);};**
* **db.Journal.mapReduce(mapfunction,reducefunction,**

{'out':'new'});

{

"result" : "new",

"timeMillis" : 49,"counts" : { "input" : 12,

"emit" : 12,

"reduce" : 4,

"output" : 5

},

"ok" : 1

}

* **db.Journal.mapReduce(mapfunction,reducefunction,**

{'out':'new'}).find().pretty();

{ "\_id" : 1, "value" : 1200 }

{ "\_id" : 2, "value" : 700 }

{ "\_id" : 3, "value" : 350 }

{ "\_id" : 4, "value" : 300 }

{ "\_id" : 5, "value" : 1200 }

>

>

* **db.new.find().pretty();**

{ "\_id" : 1, "value" : 1200 }

{ "\_id" : 2, "value" : 700 }

{ "\_id" : 3, "value" : 350 }

{ "\_id" : 4, "value" : 300 }

{ "\_id" : 5, "value" : 1200 }

>