**Assignment 12: Solution**

**> use author**

switched to db author

> db.author.save({"book\_title" : "MongoDB Tutorial", "author\_name" : "aparajita", "status" : "active", publish\_year" : "2016" })

WriteResult({ "nInserted" : 1 })

> db.author.save({ "book\_title" : "Software Testing Tutorial", "author\_name" : "aparajita", "status" : "active", "publish\_year": "2015" })

WriteResult({ "nInserted" : 1 })

> db.author.save({ "book\_title" : "Node.js Tutorial", "author\_name" : "Kritika", "status" : "active", "publish\_year": "2016" })

WriteResult({ "nInserted" : 1 })

> db.author.save({ "book\_title" : "PHP7 Tutorial", "author\_name" : "aparajita", "status" : "passive", "publish\_year": "2016" })

WriteResult({ "nInserted" : 1 })

**> db.author.find()**

{ "\_id" : ObjectId("6360b68c1be64b3c2d938cee"), "book\_title" : "MongoDB Tutorial", "author\_name" : "aparajita", "status" : "active", "publish\_year" : "2016" }

{ "\_id" : ObjectId("6360b6961be64b3c2d938cef"), "book\_title" : "Software Testing Tutorial", "author\_name" : "aparajita", "status" : "active", "publish\_year" : "2015" }

{ "\_id" : ObjectId("6360bfea1be64b3c2d938cf0"), "book\_title" : "Node.js Tutorial", "author\_name" : "Kritika", "status" : "active", "publish\_year" : "2016" }

{ "\_id" : ObjectId("6360c01f1be64b3c2d938cf1"), "book\_title" : "PHP7 Tutorial", "author\_name" : "aparajita", "status" : "passive", "publish\_year" : "2016" }

>

**> db.author.mapReduce( function() { emit(this.author\_name,1) }, function(key, values) {return Array.sum(values)}, { query:{status:"active"}, out:"author\_total" } )**

{

"result" : "author\_total",

"timeMillis" : 81,

"counts" : {

"input" : 3,

"emit" : 3,

"reduce" : 1,

"output" : 2

},

"ok" : 1

}

**db.author.mapReduce( function() { emit(this.author\_name,1) },function(key, values) {return Array.sum(values)}, { query:{status:"active"}, out:"author\_total" } ).find()**

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

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

> db.stud.insert({ Name: "Amit", Marks:80 })

WriteResult({ "nInserted" : 1 })

> db.stud.insert({ Name: "Amit", Marks:90 })

WriteResult({ "nInserted" : 1 })

> db.stud.insert({ Name: "Shreya", Marks:40 })

WriteResult({ "nInserted" : 1 })

> db.stud.insert({ Name: "Neha", Marks:80 })

WriteResult({ "nInserted" : 1 })

> db.stud.insert({ Name: "Neha", Marks:35})

WriteResult({ "nInserted" : 1 })

**> db.stud.find()**

{ "\_id" : ObjectId("6360c43d1be64b3c2d938cf2"), "Name" : "Amit", "Marks" : 80 }

{ "\_id" : ObjectId("6360c4431be64b3c2d938cf3"), "Name" : "Amit", "Marks" : 90 }

{ "\_id" : ObjectId("6360c4481be64b3c2d938cf4"), "Name" : "Shreya", "Marks" : 40 }

{ "\_id" : ObjectId("6360c44f1be64b3c2d938cf5"), "Name" : "Neha", "Marks" : 80 }

{ "\_id" : ObjectId("6360c4571be64b3c2d938cf6"), "Name" : "Neha", "Marks" : 35 }

>

**> db.stud.mapReduce( function(){ emit(this.Name,1)},function(key, values) {return Array.sum(values)}, {out: "Name\_Total" })**

{

"result" : "Name\_Total",

"timeMillis" : 70,

"counts" : {

"input" : 5,

"emit" : 5,

"reduce" : 2,

"output" : 3

},

"ok" : 1

}

**> db.stud.mapReduce( function(){ emit(this.Name,1)},function(key, values) {return Array.sum(values)}, {out: "Name\_Total" }).find()**

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

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

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

>

**> db.stud.mapReduce( function() { emit(this.Name,this.Marks) }, function(key, values) {return Array.sum(values)}, {out: "Total\_Marks" })**

{

"result" : "Total\_Marks",

"timeMillis" : 77,

"counts" : {

"input" : 5,

"emit" : 5,

"reduce" : 2,

"output" : 3

},

"ok" : 1

}

**> db.stud.mapReduce( function() { emit(this.Name,this.Marks) }, function(key, values) {return Array.sum(values)}, {out: "Total\_Marks" }).find()**

{ "\_id" : "Amit", "value" : 170 }

{ "\_id" : "Neha", "value" : 115 }

{ "\_id" : "Shreya", "value" : 40 }

**> db.stud.mapReduce(function(){ emit(this.Name,this.Marks)}, function(key, values) {return Array.sum(values)},{out: 'Name\_Total'}).find().sort({value:1})**

{ "\_id" : "Shreya", "value" : 40 }

{ "\_id" : "Neha", "value" : 115 }

{ "\_id" : "Amit", "value" : 170 }

**> db.stud.mapReduce( function(){ emit(this.Name,this.Marks)}, function(key, values) {return Array.sum(values)},{out: 'Name\_Total'}).find().limit(1)**

{ "\_id" : "Amit", "value" : 170 }

**> db.stud.mapReduce( function(){ emit(this.Name,1)}, function(key, values) {return Array.sum(values)}, {query:{Marks:{$gt:70}},out: 'Name\_Total'}).find()**

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

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