**ASSIGNMENT NO 11: Output**

> **use assignment11**

switched to db assignment11

> **db.createCollection("teachers");**

{ "ok" : 1 }

> **db.teachers.insert({tname: "Aliya", dname: "Comp", salary:11000,exp:2});**

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Jinal", dname: "Comp", salary:12000,exp:3});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Isha", dname: "Comp", salary:10000,exp:1});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Tejal", dname: "Mech", salary:10500,exp:2});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Harshi", dname: "Mech", salary:14000,exp:2});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Urvi", dname: "Mech", salary:24000,exp:5});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Rutu", dname: "IT", salary:10000,exp:1});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Trupti", dname: "IT", salary:20000,exp:4});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Surbhi", dname: "IT", salary:12000,exp:2});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Shweta", dname: "Civil", salary:10000,exp:1});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Athira", dname: "Civil", salary:12000,exp:2});

WriteResult({ "nInserted" : 1 })

> db.teachers.insert({tname: "Tejaswee", dname: "Civil", salary:15000,exp:3});

WriteResult({ "nInserted" : 1 })

> **db.teachers.find({});**

{ "\_id" : ObjectId("6360a3f81be64b3c2d938ce2"), "tname" : "Aliya", "dname" : "Comp", "salary" : 11000, "exp" : 2 }

{ "\_id" : ObjectId("6360a4061be64b3c2d938ce3"), "tname" : "Jinal", "dname" : "Comp", "salary" : 12000, "exp" : 3 }

{ "\_id" : ObjectId("6360a40d1be64b3c2d938ce4"), "tname" : "Isha", "dname" : "Comp", "salary" : 10000, "exp" : 1 }

{ "\_id" : ObjectId("6360a4141be64b3c2d938ce5"), "tname" : "Tejal", "dname" : "Mech", "salary" : 10500, "exp" : 2 }

{ "\_id" : ObjectId("6360a41c1be64b3c2d938ce6"), "tname" : "Harshi", "dname" : "Mech", "salary" : 14000, "exp" : 2 }

{ "\_id" : ObjectId("6360a4231be64b3c2d938ce7"), "tname" : "Urvi", "dname" : "Mech", "salary" : 24000, "exp" : 5 }

{ "\_id" : ObjectId("6360a42c1be64b3c2d938ce8"), "tname" : "Rutu", "dname" : "IT", "salary" : 10000, "exp" : 1 }

{ "\_id" : ObjectId("6360a4341be64b3c2d938ce9"), "tname" : "Trupti", "dname" : "IT", "salary" : 20000, "exp" : 4 }

{ "\_id" : ObjectId("6360a43a1be64b3c2d938cea"), "tname" : "Surbhi", "dname" : "IT", "salary" : 12000, "exp" : 2 }

{ "\_id" : ObjectId("6360a4421be64b3c2d938ceb"), "tname" : "Shweta", "dname" : "Civil", "salary" : 10000, "exp" : 1 }

{ "\_id" : ObjectId("6360a44a1be64b3c2d938cec"), "tname" : "Athira", "dname" : "Civil", "salary" : 12000, "exp" : 2 }

{ "\_id" : ObjectId("6360a4691be64b3c2d938ced"), "tname" : "Tejaswee", "dname" : "Civil", "salary" : 15000, "exp" : 3 }

> **db.teachers.find({},{\_id:0});**

{ "tname" : "Aliya", "dname" : "Comp", "salary" : 11000, "exp" : 2 }

{ "tname" : "Jinal", "dname" : "Comp", "salary" : 12000, "exp" : 3 }

{ "tname" : "Isha", "dname" : "Comp", "salary" : 10000, "exp" : 1 }

{ "tname" : "Tejal", "dname" : "Mech", "salary" : 10500, "exp" : 2 }

{ "tname" : "Harshi", "dname" : "Mech", "salary" : 14000, "exp" : 2 }

{ "tname" : "Urvi", "dname" : "Mech", "salary" : 24000, "exp" : 5 }

{ "tname" : "Rutu", "dname" : "IT", "salary" : 10000, "exp" : 1 }

{ "tname" : "Trupti", "dname" : "IT", "salary" : 20000, "exp" : 4 }

{ "tname" : "Surbhi", "dname" : "IT", "salary" : 12000, "exp" : 2 }

{ "tname" : "Shweta", "dname" : "Civil", "salary" : 10000, "exp" : 1 }

{ "tname" : "Athira", "dname" : "Civil", "salary" : 12000, "exp" : 2 }

{ "tname" : "Tejaswee", "dname" : "Civil", "salary" : 15000, "exp" : 3 }

>

> **db.teachers.aggregate([{$group:{\_id:"$dname",avg\_sal:{$avg:"$salary"}}}]);**

{ "\_id" : "IT", "avg\_sal" : 14000 }

{ "\_id" : "Mech", "avg\_sal" : 16166.666666666666 }

{ "\_id" : "Civil", "avg\_sal" : 12333.333333333334 }

{ "\_id" : "Comp", "avg\_sal" : 11000 }

> **db.teachers.aggregate([{$group:{\_id:"$dname",no\_of \_emp:{$sum:1}}}]);**

{ "\_id" : "IT", "no\_of\_emp" : 3 }

{ "\_id" : "Mech", "no\_of\_emp" : 3 }

{ "\_id" : "Civil", "no\_of\_emp" : 3 }

{ "\_id" : "Comp", "no\_of\_emp" : 3 }

> **db.teachers.aggregate([{$group:{\_id:"$dname",no\_of\_emp:{$max:"$salary"}}}]);**

{ "\_id" : "IT", "no\_of\_emp" : 20000 }

{ "\_id" : "Mech", "no\_of\_emp" : 24000 }

{ "\_id" : "Civil", "no\_of\_emp" : 15000 }

{ "\_id" : "Comp", "no\_of\_emp" : 12000 }

> **db.teachers.aggregate([{$group:{\_id:"$dname",total\_sal:{$sum:"$salary"}}},{$match:{total\_sal:{$gte:40000}}}]);**

{ "\_id" : "IT", "total\_sal" : 42000 }

{ "\_id" : "Mech", "total\_sal" : 48500 }

> **db.teachers.aggregate([{$group:{\_id:"$dname",total\_sal:{$sum:"$salary"}}},{$match:{total\_sal:{$gte:45000}}}]);**

{ "\_id" : "Mech", "total\_sal" : 48500 }

> **db.teachers.aggregate([{$group:{\_id:"$dname",total\_sal:{$sum:"$salary"}}},{$match:{total\_sal:{$gte:15000}}}]);**

{ "\_id" : "IT", "total\_sal" : 42000 }

{ "\_id" : "Mech", "total\_sal" : 48500 }

{ "\_id" : "Civil", "total\_sal" : 37000 }

{ "\_id" : "Comp", "total\_sal" : 33000 }

>

**> db.teachers.createIndex( { tname: -1 } )**

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

**> db.teachers.createIndex( { dname: -1 } )**

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 2,

"numIndexesAfter" : 3,

"ok" : 1

}

> **db.teachers.createIndex( { salary: 1 } )**

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 3,

"numIndexesAfter" : 4,

"ok" : 1

}

**> db.teachers.getIndexes()**

[

{

"v" : 2,

"key" : {

"\_id" : 1

},

"name" : "\_id\_",

"ns" : "assignment11.teachers"

},

{

"v" : 2,

"key" : {

"tname" : -1

},

"name" : "tname\_-1",

"ns" : "assignment11.teachers"

},

{

"v" : 2,

"key" : {

"dname" : -1

},

"name" : "dname\_-1",

"ns" : "assignment11.teachers"

},

{

"v" : 2,

"key" : {

"salary" : 1

},

"name" : "salary\_1",

"ns" : "assignment11.teachers"

}

]

>