**> show dbs**

admin 0.000GB

config 0.000GB

local 0.000GB

shanDB 0.000GB

**> use shanDB**

switched to db shanDB

> show collection

**> show collections**

Student

**To display data:-**

**> db.Student.find().pretty()**

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

**Insert Query:-**

**> db.Student.insert({sid:107,sanme:"KK",percentage:70.22,add:"Banglore"})**

WriteResult({ "nInserted" : 1 })

> **db.Student.insertMany([{sid:187,sanme:"KKa",percentage:60.22,add:"Banglore"},{sid:108,sname:"Priya",percentage:45.75}])**

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("61f27348964a4c65c562d8d8"),

ObjectId("61f27348964a4c65c562d8d9")

]

}

**Update Query:-**

**> db.Student.update({sid:187},{$set:{sid:109}})**

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

> db.Student.update({sid:109,108},{$set:{add:"Hyderabad"}})

uncaught exception: SyntaxError: missing : after property id :

@(shell):1:30

**> db.Student.update({sid:{$lte:108}},{$set:{add:"Hyderabad"}})**

WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

**> db.Student.updateMany({sid:{$gte:108}},{$set:{add:"Hyderabad"}})**

{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }

**> db.Student.updateMany({sid:{$gte:108}},{$set:{percentage:65.55,add:"Mohali"}})**

{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }

**Display with some conditions:-**

**> db.Student.find({add:"Pune"}).pretty()**

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

> db.Student.find({add:"Pune"}).pretty().limit(1)

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

**Use of Limit,Skip:-**

**> db.Student.find({add:"Pune"}).pretty().limit(1).skip(2)**

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

**Use of Count:-**

**> db.Student.find({add:"Pune"}).pretty().count()**

4

**Use of Projections means want to display that filed only which metioned from second curlly bracket with 1. By default \_id display to avoid that make 0.**

**> db.Student.find({},{sid:1}).pretty()**

{ "\_id" : ObjectId("61ee9084f106b8d8185828d6"), "sid" : 101 }

{ "\_id" : ObjectId("61ee90d9f106b8d8185828d7"), "sid" : 102 }

{ "\_id" : ObjectId("61ee90d9f106b8d8185828d8"), "sid" : 103 }

{ "\_id" : ObjectId("61efed12d10c39987c013436"), "sid" : 104 }

{ "\_id" : ObjectId("61efed31d10c39987c013437"), "sid" : 104 }

{ "\_id" : ObjectId("61efed31d10c39987c013438"), "sid" : 104 }

{ "\_id" : ObjectId("61f272fb964a4c65c562d8d7"), "sid" : 107 }

{ "\_id" : ObjectId("61f27348964a4c65c562d8d8"), "sid" : 109 }

{ "\_id" : ObjectId("61f27348964a4c65c562d8d9"), "sid" : 108 }

**> db.Student.find({},{sid:1,sname:1,\_id:0}).pretty()**

{ "sid" : 101, "sname" : "Shan" }

{ "sid" : 102, "sname" : "Om" }

{ "sid" : 103, "sname" : "Mohan" }

{ "sid" : 104, "sname" : "Priyank" }

{ "sid" : 104, "sname" : "Kunal" }

{ "sid" : 104, "sname" : "Priyank" }

{ "sid" : 107 }

{ "sid" : 109 }

{ "sid" : 108, "sname" : "Priya" }

**Use of lessthan equal to:-**

**> db.Student.find({percentage:{$lte:65}}).pretty()**

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

**Use of gretter than equal to:-**

**> db.Student.find({percentage:{$gte:65}}).pretty()**

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Hyderabad"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

{

"\_id" : ObjectId("61f272fb964a4c65c562d8d7"),

"sid" : 107,

"sanme" : "KK",

"percentage" : 70.22,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d8"),

"sid" : 109,

"sanme" : "KKa",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d9"),

"sid" : 108,

"sname" : "Priya",

"percentage" : 65.55,

"add" : "Mohali"

}

**Sort with ascending then use 1 with that filed, if decending then use -1:-**

**> db.Student.find().pretty().sort({sname:1})**

{

"\_id" : ObjectId("61f272fb964a4c65c562d8d7"),

"sid" : 107,

"sanme" : "KK",

"percentage" : 70.22,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d8"),

"sid" : 109,

"sanme" : "KKa",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d9"),

"sid" : 108,

"sname" : "Priya",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Hyderabad"

}

**> db.Student.find().pretty().sort({sname:-1})**

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Hyderabad"

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d9"),

"sid" : 108,

"sname" : "Priya",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f272fb964a4c65c562d8d7"),

"sid" : 107,

"sanme" : "KK",

"percentage" : 70.22,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d8"),

"sid" : 109,

"sanme" : "KKa",

"percentage" : 65.55,

"add" : "Mohali"

}

**> db.Student.find().pretty().sort({percentage:-1})**

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Hyderabad"

}

{

"\_id" : ObjectId("61f272fb964a4c65c562d8d7"),

"sid" : 107,

"sanme" : "KK",

"percentage" : 70.22,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d8"),

"sid" : 109,

"sanme" : "KKa",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d9"),

"sid" : 108,

"sname" : "Priya",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

**> db.Student.find().pretty().sort({percentage:1,add:-1})**

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d8"),

"sid" : 109,

"sanme" : "KKa",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61f27348964a4c65c562d8d9"),

"sid" : 108,

"sname" : "Priya",

"percentage" : 65.55,

"add" : "Mohali"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d7"),

"sid" : 102,

"sname" : "Om",

"percentage" : 65.88,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f272fb964a4c65c562d8d7"),

"sid" : 107,

"sanme" : "KK",

"percentage" : 70.22,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61ee9084f106b8d8185828d6"),

"sid" : 101,

"sname" : "Shan",

"percentage" : 75.55,

"add" : "Hyderabad"

}

{

"\_id" : ObjectId("61ee90d9f106b8d8185828d8"),

"sid" : 103,

"sname" : "Mohan",

"percentage" : 85.98

}

**Use of Count:-**

**> db.Student.find({add:"pune"}).pretty().count()**

**0**

**> db.Student.find({add:"Pune"}).pretty().count()**

**4**

**Use of remove,deleteOne,deleteMany:-**

**> db.Student.remove({sname:"Mohan"})**

WriteResult({ "nRemoved" : 1 })

**> db.Student.deleteOne({add:"Banglore"})**

{ "acknowledged" : true, "deletedCount" : 1 }

**> db.Student.deleteMany({add:"Mohali"})**

{ "acknowledged" : true, "deletedCount" : 2 }

**Use of InsertMany:-**

**> db.Student.insertMany([{sid:105,sname:"Kka",percentage:55.65,add:"Mumbai"},{sid:106,sname:"Vish",percentage:45.55,add:"Mumbai"},{sid:107,sname:"Purvi",percentage:85.75,add:"Banglore"},{sid:108,sname:"Pritesh",percentage:70.25,add:"Banglore"},{sid:109,sname:"Kiara",percentage:65.00,add:"Mumbai"}])**

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("61f2a2ca4a7c165453918636"),

ObjectId("61f2a2ca4a7c165453918637"),

ObjectId("61f2a2ca4a7c165453918638"),

ObjectId("61f2a2ca4a7c165453918639"),

ObjectId("61f2a2ca4a7c16545391863a")

]

}

**Use of Or:-**

**> db.Student.find({$or:[{sid:{$gte:104}},{percentage:{$lte:65}}]}).pretty()**

**{**

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918636"),

"sid" : 105,

"sname" : "Kka",

"percentage" : 55.65,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918637"),

"sid" : 106,

"sname" : "Vish",

"percentage" : 45.55,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918638"),

"sid" : 107,

"sname" : "Purvi",

"percentage" : 85.75,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918639"),

"sid" : 108,

"sname" : "Pritesh",

"percentage" : 70.25,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f2a2ca4a7c16545391863a"),

"sid" : 109,

"sname" : "Kiara",

"percentage" : 65,

"add" : "Mumbai"

}

**> db.Student.find({sid:{$gte:104}}).pretty()**

{

"\_id" : ObjectId("61efed12d10c39987c013436"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 55.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013437"),

"sid" : 104,

"sname" : "Kunal",

"percentage" : 45.85,

"add" : "Pune"

}

{

"\_id" : ObjectId("61efed31d10c39987c013438"),

"sid" : 104,

"sname" : "Priyank",

"percentage" : 60.52,

"add" : "Pune"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918636"),

"sid" : 105,

"sname" : "Kka",

"percentage" : 55.65,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918637"),

"sid" : 106,

"sname" : "Vish",

"percentage" : 45.55,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918638"),

"sid" : 107,

"sname" : "Purvi",

"percentage" : 85.75,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918639"),

"sid" : 108,

"sname" : "Pritesh",

"percentage" : 70.25,

"add" : "Banglore"

}

{

"\_id" : ObjectId("61f2a2ca4a7c16545391863a"),

"sid" : 109,

"sname" : "Kiara",

"percentage" : 65,

"add" : "Mumbai"

}

**Use of And Or:-**

> db.Student.find({sid:{$gte:104},$or[{add:"Mumbai"},{add:"Banglore"}]}).pretty()

uncaught exception: SyntaxError: missing : after property id :

@(shell):1:35

>

**> db.Student.count({add:"Mumbai"})**

3

**> db.Student.find({add:"Mumbai"}).length()**

3

**Use of Group and Sum:-**

**> db.Student.aggregate([{$group:{\_id:"$add",total:{$sum:1}}}])**

{ "\_id" : "Hyderabad", "total" : 1 }

**This is filed name**

{ "\_id" : "Banglore", "total" : 2 }

{ "\_id" : "Pune", "total" : 4 }

{ "\_id" : "Mumbai", "total" : 3 }

**> db.Student.aggregate([{$group:{\_id:"$percentage",total:{$sum:1}}}])**

{ "\_id" : 75.55, "total" : 1 }

{ "\_id" : 55.52, "total" : 1 }

{ "\_id" : 55.65, "total" : 1 }

{ "\_id" : 45.85, "total" : 1 }

{ "\_id" : 45.55, "total" : 1 }

{ "\_id" : 85.75, "total" : 1 }

{ "\_id" : 65.88, "total" : 1 }

{ "\_id" : 60.52, "total" : 1 }

{ "\_id" : 70.25, "total" : 1 }

{ "\_id" : 65, "total" : 1 }

**> db.Student.aggregate([{$group:{\_id:"$add",total:{$sum:2}}}])**

{ "\_id" : "Mumbai", "total" : 6 }

{ "\_id" : "Pune", "total" : 8 }

{ "\_id" : "Banglore", "total" : 4 }

{ "\_id" : "Hyderabad", "total" : 2 }

**> db.Student.aggregate([{$group:{\_id:"$add",total:{$sum:0}}}])**

{ "\_id" : "Mumbai", "total" : 0 }

{ "\_id" : "Pune", "total" : 0 }

{ "\_id" : "Banglore", "total" : 0 }

{ "\_id" : "Hyderabad", "total" : 0 }

> **db.Student.aggregate([{$group:{\_id:"$percentage",total:{$sum:1},totalOfPercent:{$sum:"$percentage"}}}])**

{ "\_id" : 75.55, "total" : 1, "totalOfPercent" : 75.55 }

{ "\_id" : 55.52, "total" : 1, "totalOfPercent" : 55.52 }

{ "\_id" : 55.65, "total" : 1, "totalOfPercent" : 55.65 }

{ "\_id" : 45.85, "total" : 1, "totalOfPercent" : 45.85 }

{ "\_id" : 45.55, "total" : 1, "totalOfPercent" : 45.55 }

{ "\_id" : 85.75, "total" : 1, "totalOfPercent" : 85.75 }

{ "\_id" : 65.88, "total" : 1, "totalOfPercent" : 65.88 }

{ "\_id" : 60.52, "total" : 1, "totalOfPercent" : 60.52 }

{ "\_id" : 70.25, "total" : 1, "totalOfPercent" : 70.25 }

{ "\_id" : 65, "total" : 1, "totalOfPercent" : 65 }

**Use of regex:-**

**> db.Student.find({add:{$regex:"Mumbai"}}).pretty()**

{

"\_id" : ObjectId("61f2a2ca4a7c165453918636"),

"sid" : 105,

"sname" : "Kka",

"percentage" : 55.65,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918637"),

"sid" : 106,

"sname" : "Vish",

"percentage" : 45.55,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c16545391863a"),

"sid" : 109,

"sname" : "Kiara",

"percentage" : 65,

"add" : "Mumbai"

}

**> db.Student.find({add:{$regex:"mumbai"}}).pretty()**

Nothing print bcse mumbai not match with case

**> db.Student.find({add:{$regex:"mumbai",$options:"$i"}}).pretty()**

(with ignore case)

{

"\_id" : ObjectId("61f2a2ca4a7c165453918636"),

"sid" : 105,

"sname" : "Kka",

"percentage" : 55.65,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918637"),

"sid" : 106,

"sname" : "Vish",

"percentage" : 45.55,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c16545391863a"),

"sid" : 109,

"sname" : "Kiara",

"percentage" : 65,

"add" : "Mumbai"

}

**> db.Student.find({add:/Mumbai/}).pretty()**

{

"\_id" : ObjectId("61f2a2ca4a7c165453918636"),

"sid" : 105,

"sname" : "Kka",

"percentage" : 55.65,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c165453918637"),

"sid" : 106,

"sname" : "Vish",

"percentage" : 45.55,

"add" : "Mumbai"

}

{

"\_id" : ObjectId("61f2a2ca4a7c16545391863a"),

"sid" : 109,

"sname" : "Kiara",

"percentage" : 65,

"add" : "Mumbai"

}

**> db.Student.find({add:/mumbai/}).pretty()**

Nothing will print not match with mumbai case,for this ignore case not work

**> db.Student.aggregate([{$match:{add:"Mumbai"}}])**

{ "\_id" : ObjectId("61f2a2ca4a7c165453918636"), "sid" : 105, "sname" : "Kka", "percentage" : 55.65, "add" : "Mumbai" }

{ "\_id" : ObjectId("61f2a2ca4a7c165453918637"), "sid" : 106, "sname" : "Vish", "percentage" : 45.55, "add" : "Mumbai" }

{ "\_id" : ObjectId("61f2a2ca4a7c16545391863a"), "sid" : 109, "sname" : "Kiara", "percentage" : 65, "add" : "Mumbai" }

**> db.Student.aggregate([{$match:{add:"Mumbai"}},{$project:{"sname":1,"add":1}}])**

{ "\_id" : ObjectId("61f2a2ca4a7c165453918636"), "sname" : "Kka", "add" : "Mumbai" }

{ "\_id" : ObjectId("61f2a2ca4a7c165453918637"), "sname" : "Vish", "add" : "Mumbai" }

{ "\_id" : ObjectId("61f2a2ca4a7c16545391863a"), "sname" : "Kiara", "add" : "Mumbai" }

> **db.Student.aggregate([{$match:{add:"Mumbai"}},{$project:{"sname":1,"add":1,"\_id":0}}])**

{ "sname" : "Kka", "add" : "Mumbai" }

{ "sname" : "Vish", "add" : "Mumbai" }

{ "sname" : "Kiara", "add" : "Mumbai" }

**> db.studentExam.aggregate([{$group:{\_id:"$marks",countStud:{$sum:1}}}])**

{ "\_id" : 70.22, "countStud" : 1 }

{ "\_id" : 74.34, "countStud" : 2 }

{ "\_id" : 77.85, "countStud" : 1 }

{ "\_id" : 65.45, "countStud" : 2 }

{ "\_id" : 85.75, "countStud" : 1 }

{ "\_id" : 58.55, "countStud" : 2 }

**> db.studentExam.aggregate([{$group:{\_id:"$add",countStud:{$sum:1}}}])**

{ "\_id" : "Pune", "countStud" : 4 }

{ "\_id" : "Banglore", "countStud" : 2 }

{ "\_id" : "Mumbai", "countStud" : 3 }

**> db.studentExam.aggregate({$group:{\_id:"",total:{$sum:"$marks"}}},{$project:{\_id:0,"totalMarks":"$total"}})**

{ "totalMarks" : 630.5 }

**> db.studentExam.aggregate([{$match:{marks:{$gt:60}}},{$count:"NoOfStudGrtthan60"}])**

{ "NoOfStudGrtthan60" : 7 }

**Capped collection:-**

**db.createCollection("Employee",{capped:true,max:6,size:80})**

{ "ok" : 1 }

**> db.Employee.insert({eid:102,name:"Shail",salary:45000,gender:"Male"})**

WriteResult({ "nInserted" : 1 })

**> db.Employee.insert({eid:103,name:"Suma",salary:15000,gender:"Female"})**

WriteResult({ "nInserted" : 1 })

> db.Employee.insertMany([{eid:104,name:"Sruthi",salary:25000,gender:"Female"},{eid:105,name:"Kapil",salary:65000,gender:"Male"},{eid:106,name:"Priyesh",salary:35000,gender:"Male"}])

{

"acknowledged" : true,

"insertedIds" : [

ObjectId("61f4c41a51ab2a1859b2ba3a"),

ObjectId("61f4c41a51ab2a1859b2ba3b"),

ObjectId("61f4c41a51ab2a1859b2ba3c")

]

}

**> db.Employee.find()**

{ "\_id" : ObjectId("61f4c41a51ab2a1859b2ba3b"), "eid" : 105, "name" : "Kapil", "salary" : 65000, "gender" : "Male" }

{ "\_id" : ObjectId("61f4c41a51ab2a1859b2ba3c"), "eid" : 106, "name" : "Priyesh", "salary" : 35000, "gender" : "Male" }

>

**> var mapFucn=function(){emit(this.eid,this.salary\*2)}**

**> var reduceFucn=function(key,values){return Array.sum(values)}**

**> db.Emp.mapReduce(mapFucn,reduceFucn,{"out":"Result\_MapReduce"})**

{ "result" : "Result\_MapReduce", "ok" : 1 }

**> db.Result\_MapReduce.find()**

{ "\_id" : 101, "value" : 110000 }

{ "\_id" : 102, "value" : 90000 }

{ "\_id" : 104, "value" : 70000 }

{ "\_id" : 105, "value" : 50000 }

{ "\_id" : 103, "value" : 50000 }

{ "\_id" : 106, "value" : 90000 }

**> db.Student.createIndex({sid:1})**

{

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"createdCollectionAutomatically" : false,

"ok" : 1

}

**> db.Student.getIndexes()**

[

{

"v" : 2,

"key" : {

"\_id" : 1

},

"name" : "\_id\_"

},

{

"v" : 2,

"key" : {

"sid" : 1

},

"name" : "sid\_1"

}

]

**> db.Student.dropIndex({sid:1})**

{ "nIndexesWas" : 2, "ok" : 1 }

**> db.Student.getIndexes()**

[ { "v" : 2, "key" : { "\_id" : 1 }, "name" : "\_id\_" } ]