>mongosh

>db.createCollection('student')

>db.student.insert({roll:1,name:"navin",age:21,subject\_marks:{OOP:70,DSA:80}})

>db.student.insert([{roll:2,name:"saurabh",age:19,subject\_marks:{OOP:90,DSA:85}},

{roll:3,name:"aditya",age:20,subject\_marks:{OOP:82,DSA:74}},

{roll:4,name:"anusha",age:19,subject\_marks:{OOP:70,DSA:65}},

{roll:5,name:"anurag",age:20,subject\_marks:{OOP:98,DSA:95}}])

> db.student.find().pretty()

//Unique Index

> db.student.createIndex({'roll':1},{unique:true})

//Simple Index

> db.student.createIndex({"name":1})

//Compound Index

> db.student.createIndex({"subject\_marks.OOP":-1,"subject\_marks.DSA":-1})

> db.student.getIndexes()

> db.student.find().pretty().sort({name:1})

> db.student.find().pretty().sort({"subject\_marks.OOP":-1,"subject\_marks.DSA":-1})

> db.student.distinct('age')

> db.student.aggregate([{$group:{\_id:"$age",count:{$sum:1}}},{$sort:{"\_id":1}}])

> db.student.aggregate([{$group:{\_id:"OOP",maxMarks:{$max:"$subject\_marks.OOP"}}}])

{ "\_id" : "OOP", "maxMarks" : 98 }

> db.student.aggregate([{$group:{\_id:"DSA",minMarks:{$min:"$subject\_marks.DSA"}}}])

{ "\_id" : "DSA", "minMarks" : 65 }

>db.student.aggregate([{$project:{\_id:"$roll",sum:{$sum:["$subject\_marks.OOP","$subject\_marks.DSA"]}}},{$sort:{sum:1}}])