**1. Perform CURD operation**

C:\Users\student.MCALAB&gt;cd c:\Program Files\MongoDB\Server\5.0\bin

>

**//create databse**

> use Amrutha;  
switched to db Amrutha

**//create collection**

> db.createCollection('Student');  
{ "ok" : 1 }

**//insertion**

> db.Student.insert({'Rno':'1','Name':'Piyush','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })  
> db.Student.insert({'Rno':'2','Name':'Abhi','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })  
>db.Student.insert({'Rno':'3','Name':'Ashley','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })  
> db.Student.insert({'Rno':'4','Name':'Hitesh','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })  
> db.Student.insert({'Rno':'5','Name':'Pratik','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })  
> db.Student.insert({'Rno':'6','Name':'Pratik','Class':'TE COMP'});  
WriteResult({ "nInserted" : 1 })

**//select**

> db.Student.find();  
{ "\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"), "Rno" : "1",  
"Name" : "Piyush", "Class" : "TE COMP" }  
{ "\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"), "Rno" : "2",  
"Name" : "Abhi", "Class" : "TE COMP" }  
{ "\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"), "Rno" : "3",  
"Name" : "Ashley", "Class" : "TE COMP" }  
{ "\_id" : ObjectId("5ba1d647f5bbacd4ad815690"), "Rno" : "4",  
"Name" : "Hitesh", "Class" : "TE COMP" }  
{ "\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"), "Rno" : "5",  
"Name" : "Pratik", "Class" : "TE COMP" }  
{ "\_id" : ObjectId("5ba1d66df5bbacd4ad815692"), "Rno" : "6",  
"Name" : "Pratik", "Class" : "TE COMP" }  
> db.Student.find().pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2","Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//update**

> db.Student.update({'Name':'Hitesh'},{$set: {'Name':'Henry'}});  
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1})  
> db.Student.find().pretty();  
{  
"\_id" : ObjectId("5b8fad4ef00832a0a50b5036"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad62f00832a0a50b5037"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad70f00832a0a50b5038"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad7ff00832a0a50b5039"),  
"Rno" : "4",  
"Name" : "Henry",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad8df00832a0a50b503a"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fada4f00832a0a50b503b"),"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//remove**

> db.Student.remove({'ADD':'MP'});  
WriteResult({ "nRemoved" : 1 })  
> db.Student.find().pretty();  
{  
"\_id" : ObjectId("5b8fad62f00832a0a50b5037"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad70f00832a0a50b5038"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad7ff00832a0a50b5039"),  
"Rno" : "4",  
"Name" : "Henry",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad8df00832a0a50b503a"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{"\_id" : ObjectId("5b8fada4f00832a0a50b503b"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//save**

>db.Student.save({\_id:ObjectId("5b8fad4ef00832a0a50b5036"),"RNO  
":"1","NAME":"PIYUSH","CLASS":"TE COMP","ADD":"MP"});  
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1})  
> db.Student.find().pretty();  
{  
"\_id" : ObjectId("5b8fad4ef00832a0a50b5036"),  
"RNO" : "1",  
"NAME" : "PIYUSH",  
"CLASS" : "TE COMP",  
"ADD" : "MP"  
}  
{  
"\_id" : ObjectId("5b8fad62f00832a0a50b5037"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad70f00832a0a50b5038"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad7ff00832a0a50b5039"),  
"Rno" : "4","Name" : "Henry",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fad8df00832a0a50b503a"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5b8fada4f00832a0a50b503b"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//and**

> db.Student.find({$and:[{"Name":"Piyush"},{"Rno":"2"}]});  
> db.Student.find({$and:[{"Name":"Piyush"},  
{"Rno":"1"}]}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}

**//or**

> db.Student.find({$or:[{"Name":"Piyush"},{"Rno":"2"}]}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush","Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
> db.Student.find({$or:[{"Name":"Piyush"},{"Class":"TE  
COMP"}]}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh","Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//nor**

> db.Student.find({$nor:[{"Name":"Piyush"},{"Class":"TE  
COMP"}]}).pretty();  
> db.Student.find({$nor:[{"Name":"Piyush"},  
{"Rno":"2"}]}).pretty();  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
db.Student.find( {"Rno": { $not:{$lt:"3"}}}).pretty();  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6","Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//eq**

> db.Student.find( {"Rno": { $eq:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//ne**

> db.Student.find( {"Rno": { $ne:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4","Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//gt**

> db.Student.find( {"Rno": { $gt:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//gte**

> db.Student.find( {"Rno": { $gte:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d66df5bbacd4ad815692"),  
"Rno" : "6",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}

**//lt**

> db.Student.find( {"Rno": { $lt:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}

**//lte**

> db.Student.find( {"Rno": { $lte:"5"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d618f5bbacd4ad81568d"),  
"Rno" : "1",  
"Name" : "Piyush",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2","Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
> db.Student.find( {"Rno": { $lt:"5",$gt:"2"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh","Class" : "TE COMP"  
}  
> db.Student.find( {"Rno": { $lte:"5",$gte:"2"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
> db.Student.find( {"Rno": { $lte:"5",$gt:"2"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley","Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d65ef5bbacd4ad815691"),  
"Rno" : "5",  
"Name" : "Pratik",  
"Class" : "TE COMP"  
}  
> db.Student.find( {"Rno": { $lt:"5",$gte:"2"}}).pretty();  
{  
"\_id" : ObjectId("5ba1d625f5bbacd4ad81568e"),  
"Rno" : "2",  
"Name" : "Abhi",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d63af5bbacd4ad81568f"),  
"Rno" : "3",  
"Name" : "Ashley",  
"Class" : "TE COMP"  
}  
{  
"\_id" : ObjectId("5ba1d647f5bbacd4ad815690"),  
"Rno" : "4",  
"Name" : "Hitesh",  
"Class" : "TE COMP"}