

1) use student

```
> use student
switched to db student
```

```
2) > db.studentmarks.insert({name:"Mala",maths_marks:45,english_marks:53,science_marks:72})
WriteResult({ "nInserted" : 1 })
```

```
> db.studentmarks.find().pretty()
```

```
> db.studentmarks.insert({name:"Vanu",maths_marks:80,english_marks:75,science_marks:85})
WriteResult({ "nInserted" : 1 })
```

```
> db.studentmarks.insert({name:"Kala",maths_marks:32,english_marks:46,science_marks:53})
WriteResult({ "nInserted" : 1 })
```

```
> db.studentmarks.insert({name:"Aruli",maths_marks:78,english_marks:85,science_marks:80})
WriteResult({ "nInserted" : 1 })
```

```
>db.studentmarks.insert({name:"Shayu",maths_marks:80,english_marks:76,science_marks:65})
)
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.studentmarks.insert({name:"Kumaran",maths_marks:32,english_marks:73,science_marks:84})
})
```

```
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.studentmarks.insert({name:"Lucky",maths_marks:66,english_marks:90,science_marks:45})
WriteResult({ "nInserted" : 1 })
```

```
> db.studentmarks.insert({name:"Gva",maths_marks:71,english_marks:75,science_marks:56})
WriteResult({ "nInserted" : 1 })
```

```
>
```

```
db.studentmarks.insert({name:"Raam",maths_marks:41,english_marks:65,science_marks:88})
WriteResult({ "nInserted" : 1 })
```

```
> db.studentmarks.insert({name:"Mala",maths_marks:45,english_marks:53,science_marks:72})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.find().pretty()
{
  "_id" : ObjectId("592553d6da9063f2f9515232"),
  "name" : "Mala",
  "maths_marks" : 45,
  "english_marks" : 53,
  "science_marks" : 72
}
> db.studentmarks.insert({name:"Vanu",maths_marks:80,english_marks:75,science_marks:85})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Kala",maths_marks:32,english_marks:46,science_marks:53})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Aruli",maths_marks:78,english_marks:85,science_marks:80})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Shayu",maths_marks:80,english_marks:76,science_marks:65})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Kumaran",maths_marks:32,english_marks:73,science_marks:84})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Lucky",maths_marks:66,english_marks:90,science_marks:45})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Gva",maths_marks:71,english_marks:75,science_marks:56})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.insert({name:"Raam",maths_marks:41,english_marks:65,science_marks:88})
WriteResult({ "nInserted" : 1 })
```

3) db.studentmarks.update({name:"Mala"},{\$inc:{maths_marks:1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

```
> db.studentmarks.update({name:"Mala"},{$inc:{maths_marks:1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

4) db.studentmarks.find({maths_marks:{\$gt:50}})

```
> db.studentmarks.find({maths_marks:{$gt:50}})
{ "_id" : ObjectId("5925541fda9063f2f9515233"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("5925547ada9063f2f9515235"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("592554afda9063f2f9515236"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("592554ffda9063f2f9515238"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "science_marks" : 45 }
{ "_id" : ObjectId("59255531da9063f2f9515239"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
{ "_id" : ObjectId("592555ceb74f50b4cc4c08378"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
```

5) db.studentmarks.find({"maths_marks":{\$gt:50}}).pretty()

```
> db.studentmarks.find({"maths_marks":{$gt:50}})
{ "_id" : ObjectId("59268c0f202c12c9a80006b3"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("59268c1202c12c9a80006b4"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("59268c1502c12c9a80006b5"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("59268c1a202c12c9a80006b6"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("59268c1d202c12c9a80006b8"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "marks_science" : 45 }
{ "_id" : ObjectId("59268c1e202c12c9a80006b9"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
```

6) db.studentmarks.update({},{\$set:{"average":""}},{upsert:false,multi:true})

```
> db.studentmarks.update({},{$set:{"average":""}},{upsert:false,multi:true})
WriteResult({ "nMatched" : 9, "nUpserted" : 0, "nModified" : 9 })
```

7) db.studentmarks.update({name:"Lucky"},{\$rename:{science_marks:"marks_science"}})

```
> db.studentmarks.update({name:"Lucky"},{$rename:{science_marks:"marks_science"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

8) db.studentmarks.find({\$or:[{"maths_marks":{\$gt:50}},{"science_marks":{\$gt:50}}, {"english_marks":{\$gt:50}}},{ "name":1,_id:0}).pretty()

```
> db.studentmarks.find({$or:[{"maths_marks":{$gt:50}},{"science_marks":{$gt:50}}, {"english_marks":{$gt:50}}},{ "name":1,_id:0})
{ "name" : "Mala" }
{ "name" : "Vanu" }
{ "name" : "Aruli" }
{ "name" : "Shayu" }
{ "name" : "Kumaran" }
{ "name" : "Lucky" }
{ "name" : "Gva" }
{ "name" : "Raam" }
{ "name" : "Kala" }
```

Index Type	Index Value	Index Options
unique	Boolean	Creates a unique index so that the collection will not accept insertion of documents where the index key or keys match an existing value in the

9) db.studentmarks.find({\$or:[{"maths_marks":{\$lt:50}},{"english_marks":{\$gt:50}}]}, {"name":1,_id:0}).pretty()

```
> db.studentmarks.find({$or:[{"maths_marks":{$lt:50}},{"english_marks":{$gt:50}}]}, {"name":1,_id:0}).pretty()
{ "name" : "Mala" }
{ "name" : "Vanu" }
{ "name" : "Aruli" }
{ "name" : "Shayu" }
{ "name" : "Kumaran" }
{ "name" : "Lucky" }
{ "name" : "Gva" }
{ "name" : "Raam" }
{ "name" : "Kala" }
```

10) db.studentmarks.find({\$and:[{"maths_marks":{\$lt:40}},{"science_marks":{\$lt:40}}]}, {"name":1,_id:0}).pretty()

```
> db.studentmarks.find({$and:[{"maths_marks":{$lt:40}},{"science_marks":{$lt:40}}]}, {"name":1,_id:0}).pretty()
{ "name" : "Kumaran" }
{ "_id" : ObjectId("5925626594886def0febe083"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "name" : "Kala" }
```

11) db.studentmarks.update({name:"Raam"},{\$unset:{science_marks:1}},{multi:false})

```
> db.studentmarks.update({name:"Raam"},{$unset:{science_marks:1}},{multi:false})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.studentmarks.find()
{ "_id" : ObjectId("59268c0f202c12c9a80006b3"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("59268c12202c12c9a80006b4"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("59268c15202c12c9a80006b5"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("59268c1a202c12c9a80006b6"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("59268c1c202c12c9a80006b7"), "name" : "Kumaran", "maths_marks" : 32, "english_marks" : 73, "science_marks" : 84 }
{ "_id" : ObjectId("59268c1d202c12c9a80006b8"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "marks_science" : 45 }
{ "_id" : ObjectId("59268c1e202c12c9a80006b9"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
{ "_id" : ObjectId("59268c1f202c12c9a80006ba"), "name" : "Raam", "maths_marks" : 41, "english_marks" : 65 }
{ "_id" : ObjectId("59268dd7202c12c9a80006bb"), "name" : "Kala", "maths_marks" : 32, "english_marks" : 46, "science_marks" : 53 }
```

12) db.studentmarks.insert({name:"John",maths_marks:87,english_marks:23})

```
> db.studentmarks.insert({name:"John",maths_marks:87,english_marks:23})
WriteResult({ "nInserted" : 1 })
> db.studentmarks.find()
{ "_id" : ObjectId("59268c0f202c12c9a80006b3"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("59268c12202c12c9a80006b4"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("59268c15202c12c9a80006b5"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("59268c1a202c12c9a80006b6"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("59268c1c202c12c9a80006b7"), "name" : "Kumaran", "maths_marks" : 32, "english_marks" : 73, "science_marks" : 84 }
{ "_id" : ObjectId("59268c1d202c12c9a80006b8"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "marks_science" : 45 }
{ "_id" : ObjectId("59268c1e202c12c9a80006b9"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
{ "_id" : ObjectId("59268c1f202c12c9a80006ba"), "name" : "Raam", "maths_marks" : 41, "english_marks" : 65 }
{ "_id" : ObjectId("59268dd7202c12c9a80006bb"), "name" : "Kala", "maths_marks" : 32, "english_marks" : 46, "science_marks" : 53 }
{ "_id" : ObjectId("5926c090e8918f1abd075341"), "name" : "John", "maths_marks" : 87, "english_marks" : 23 }
```

13) db.studentmarks.update ({'name':"John"},{\$rename: {"english_marks":"science_marks"}},false,true)

```
> db.studentmarks.update({'name':"John"},{$rename: {"english_marks":"science_marks"}},false,true)
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 0 })
> db.studentmarks.find()
{ "_id" : ObjectId("59268c0f202c12c9a80006b3"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("59268c12202c12c9a80006b4"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("59268c15202c12c9a80006b5"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("59268c1a202c12c9a80006b6"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("59268c1c202c12c9a80006b7"), "name" : "Kumaran", "maths_marks" : 32, "english_marks" : 73, "science_marks" : 84 }
{ "_id" : ObjectId("59268c1d202c12c9a80006b8"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "marks_science" : 45 }
{ "_id" : ObjectId("59268c1e202c12c9a80006b9"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
{ "_id" : ObjectId("59268c1f202c12c9a80006ba"), "name" : "Raam", "maths_marks" : 41, "english_marks" : 65 }
{ "_id" : ObjectId("59268dd7202c12c9a80006bb"), "name" : "Kala", "maths_marks" : 32, "english_marks" : 46, "science_marks" : 53 }
{ "_id" : ObjectId("5926c090e8918f1abd075341"), "name" : "John", "maths_marks" : 87, "science_marks" : 23 }
```

14) db.studentmarks.remove({"name":"Kumaran"},{})

```
> db.studentmarks.remove({"name":"Kumaran"},{})
WriteResult({ "nRemoved" : 1 })
> db.studentmarks.find()
{ "_id" : ObjectId("59268c0f202c12c9a80006b3"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("59268c12202c12c9a80006b4"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("59268c15202c12c9a80006b5"), "name" : "Aruli", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("59268c1a202c12c9a80006b6"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("59268c1d202c12c9a80006b8"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "marks_science" : 45 }
{ "_id" : ObjectId("59268c1e202c12c9a80006b9"), "name" : "Gva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
{ "_id" : ObjectId("59268c1f202c12c9a80006ba"), "name" : "Raam", "maths_marks" : 41, "english_marks" : 65 }
{ "_id" : ObjectId("59268dd7202c12c9a80006bb"), "name" : "Kala", "maths_marks" : 32, "english_marks" : 46, "science_marks" : 53 }
{ "_id" : ObjectId("5926c090e8918f1abd075341"), "name" : "John", "maths_marks" : 87, "science_marks" : 23 }
```

15) db.studentmarks.find({\$or:[{name:"Kala"},{name:"Aruli"}]},
{"name":1,_id:0,maths_marks:1,science_marks:1}).pretty()

```
> db.studentmarks.find({$or:[{name:"Kala"},{name:"Aruli"}]},{"name":1,_id:0,maths_marks:1,science_marks:1}).pretty()
{ "name" : "Aruli", "maths_marks" : 78, "science_marks" : 80 }
{ "name" : "Kala", "maths_marks" : 32, "science_marks" : 53 }
```